```
=> fil reg
FILE 'REGISTRY' ENTERED AT 17:48:04 ON 11 MAR 2003
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STRUCTURE FILE UPDATES:   10 MAR 2003  HIGHEST RN 497818-02-7
DICTIONARY FILE UPDATES:  10 MAR 2003  HIGHEST RN 497818-02-7

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d sta que l29
L1                STR
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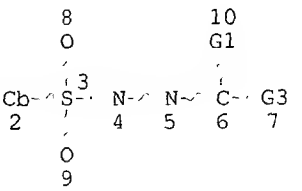


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VAR G2=S/C/N/O
VAR G3=C/N
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  10

STEREO ATTRIBUTES: NONE
L3          1570 SEA FILE=REGISTRY SSS FUL L1
L23               STR
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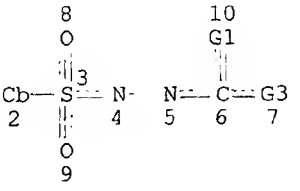

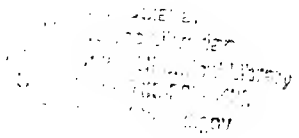

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VAR G2=S/C/N/O
VAR G3=C/N
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DEFAULT MLEVEL IS ATOM
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
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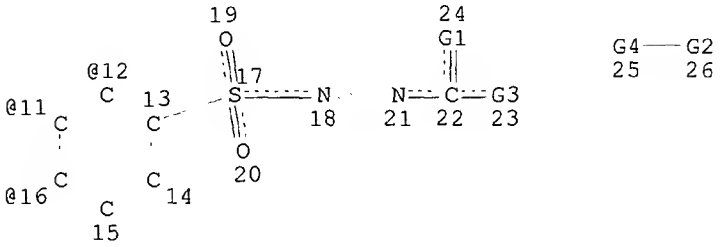
L28 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 11
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
L29 1435 SEA FILE=REGISTRY SUB=L27 SSS FUL L28

100.0% PROCESSED 1461 ITERATIONS 1435 ANSWERS
SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 17:28:39 ON 11 MAR 2003)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 17:28:49 ON 11 MAR 2003
L1 STR
L2 50 S L1
L3 1570 S L1 FUL
SAV L3 GERSTL994/A

FILE 'HCAPLUS' ENTERED AT 17:30:23 ON 11 MAR 2003
L4 512 S L3
E HAMILTON G/AU
L5 64 S E3,E17,E18
E HAMILTON GREG/AU
L6 133 S E3-E6,E9,E10
E BELYAKOV S/AU
L7 153 S E3-E14
E VAAL M/AU
L8 26 S E4,E5,E8,E9

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                E WEI L/AU
L9          271 S E3-E18
                E WEI LING/AU
L10          86 S E3-E11
L11          24 S E12-E22
                E WU Y/AU
L12         629 S E3,E25
                E WU YONG/AU
L13         150 S E3,E33
L14           5 S E97
                E STEINER J/AU
L15          63 S E3,E13
L16           3 S E42
L17         112 S E61,E63,E64
                E GUILFORD/PA,CS
                E GUILF/PA,CS
L18         419 S E5-E24
L19         200 S E25-E40
L20         416 S GUILFORD?/PA,CS
L21           1 S L4 AND L5-L20

     FILE 'REGISTRY' ENTERED AT 17:34:25 ON 11 MAR 2003
L22           1 S 433977-26-5
L23             STR L1
L24          50 S L23 SAM SUB=L3
L25        1534 S L23 FUL SUB=L3
                SAV L25 GERSTL994A/A
L26          36 S L3 NOT L25
L27        1461 S L25 AND 46.150.18/RID
L28             STR L23
L29        1435 S L28 FUL SUB=L27
                SAV L29 GERSTL994B/A

     FILE 'HCAPLUS' ENTERED AT 17:42:56 ON 11 MAR 2003
L30           1 S L22
L31         451 S L29
L32        5987 S CYCLOPHILIN? OR CYP OR IMMUNOPHILIN?
L33           1 S L31 AND L32
L34          25 S L31 (L) THU/RL
L35          55 S L31 AND (PHARMACEUT? OR PHARMACOL?)/SC,SX
L36         193 S L31 AND P/DT
L37          24 S L36 AND L34,L35
L38          24 S L21,L30,L33,L37
L39           7 S L34 NOT L38
L40           1 S L39 AND ?MALAR?
L41          25 S L38,L40
L42          30 S L35 NOT L37-L41
L43          13 S L42 AND BENZ?/SC,SX
L44           9 S L41 AND BENZ?/SC,SX
L45          22 S L43,L44
L46          16 S L41 NOT L45
                SEL DN AN 10 15 16
L47           3 S E1-E9 AND L46
L48          25 S L45,L47

     FILE 'REGISTRY' ENTERED AT 17:48:04 ON 11 MAR 2003

=> d ide can l22

L22  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS
RN   433977-26-5  REGISTRY
CN   Benzenesulfonic acid, 3-[(1-oxo-5-phenylpentyl)amino]-,
     2-[[(3,4-dichlorophenyl)amino]thioxomethyl]hydrazide (9CI)  (CA INDEX
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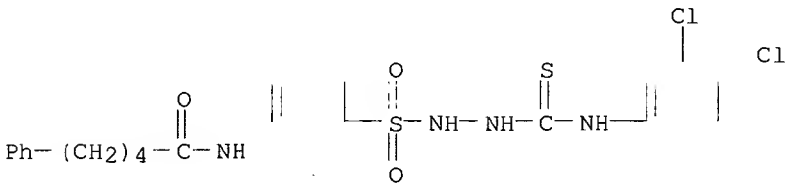
NAME)
FS 3D CONCORD
MF C24 H24 Cl2 N4 O3 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:20228

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FILE 'HCAPLUS' ENTERED AT 17:48:21 ON 11 MAR 2003
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FILE COVERS 1907 - 11 Mar 2003 VOL 138 ISS 11
FILE LAST UPDATED: 10 Mar 2003 (20030310/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d l48 all fhitstr tot

L48 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:588980 HCAPLUS
DN 137:135080
TI Modification of NSAIDs by sulfur-containing functional groups
IN Lai, Ching-San; Wang, Tingmin
PA Medinox, Inc., USA
SO U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 602,688.
CODEN: USXXAM
DT **Patent**
LA English
IC ICM A61K031-48
ICS A61K031-405; A61K031-255; A61K031-40; A61K037-34

NCL 514411000
CC 1-7 (**Pharmacology**)
Section cross-reference(s): **25**, 63
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6429223	B1	20020806	US 2000-715767	20001117
	US 6355666	B1	20020312	US 2000-602688	20000623
	WO 2002000167	A2	20020103	WO 2001-US19750	20010619
	WO 2002000167	A3	20020404		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001070010	A5	20020108	AU 2001-70010	20010619
PRAI	US 2000-602688	A2	20000623		
	US 2000-715767	A1	20001117		
	WO 2001-US19750	W	20010619		

AB A method for the alleviation of side effects induced by the administration of a nonsteroidal anti-inflammatory drug (NSAID) to a subject comprises chem. modifying the NSAID by covalent attachment of a sulfur-contg. functional group, such as sulfoxide, sulfonate, reverse sulfonate, sulfonamide, reverse sulfonamide, sulfone, sulfinate, or reverse sulfinate to provide prodrugs. The max. blood concn. (Cmax) of the prodrug is reduced relative to the unmodified NSAID by about 10-90%. For example, oral administration of a naproxen prodrug, i.e., a conjugate of naproxen and tosylate (prepn. given), resulted in the release of free naproxen. In rats, the prodrug had equiv. pharmacol. efficacy and greatly improved gastrointestinal safety profile compared to naproxen.

ST nonsteroidal antiinflammatory prodrug sulfur functional group side effect

IT AIDS (disease)
(AIDS dementia complex; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Mental disorder
(AIDS dementia; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Nervous system
(Huntington's chorea; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Arthritis
(adjuvant; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Respiratory distress syndrome
(adult; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Transplant rejection
(allotransplant; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Nervous system
(amyotrophic lateral sclerosis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Heart, disease
(angina pectoris; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Artery
(angioplasty, postangioplasty; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Nervous system

(central, trauma; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Fatigue, biological
(chronic fatigue syndrome; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Pain
(chronic; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Artery, disease
(coronary; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Nervous system
(degeneration, chronic; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Mental disorder
(depression; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Penis
(disease, priapism; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Gastrointestinal motility
(disorder, dysmotility; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Heart, disease
Kidney, disease
(failure; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Stomach, disease
(gastritis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Kidney, disease
(glomerulonephritis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Transplant and Transplantation
(graft-vs.-host reaction; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Neoplasm
(hematol.; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Dialysis
(hemodialysis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Shock (circulatory collapse)
(hemorrhagic; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Functional groups
(hydrocarbyl; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Appetite
(hyperphagia; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Intestine, disease
(ileitis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Lymphocytic choriomeningitis virus
(infection; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Intestine, disease
(inflammatory; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Head
Lung, disease
Reperfusion

(injury; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Brain, disease
(ischemia; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Headache
(migraine; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Myeloproliferative disorders
(myelofibrosis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Heart, disease
(myocarditis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Anti-inflammatory agents
(nonsteroidal; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Pancreas, disease
(pancreatitis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Peritoneum
(peritonitis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT Ovarian cycle
(premenstrual syndrome; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
IT AIDS (disease)
Alzheimer's disease
Analgesia
Analgesics
Anaphylaxis
Anxiety
Arthritis
Asthma
Atherosclerosis
Autoimmune disease
Burn
Cachexia
Cardiopulmonary bypass
Cirrhosis
Cystic fibrosis
Dermatitis
Diabetes mellitus
Drug dependence
Eczema
Encephalomyelitis
Epilepsy
Eye, disease
Headache
Heart, disease
Hepatitis
Infection
Inflammation
Intestine, disease
Ischemia
Liver, disease
Malaria
Meningitis
Multiple sclerosis
Myasthenia gravis
Neoplasm
Obesity
Osteoarthritis

Pain
Parkinson's disease
Psoriasis
Rheumatoid arthritis
Schizophrenia
Ulcer
Urticaria
(prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Drug delivery systems
(prodrugs; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Artery, disease
(restenosis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Shock (circulatory collapse)
(septic; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Neoplasm
(solid; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Brain, disease
(stroke; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Functional groups
(sulfinate; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Functional groups
(sulfonamide; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Functional groups
(sulfonate group; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Functional groups
(sulfone; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Functional groups
(sulfoxide; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Functional groups
(sulfur-contg. groups; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Lupus erythematosus
(systemic; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Shock (circulatory collapse)
(toxic shock syndrome; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Cytokines
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(treatment with; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Intestine, disease
(ulcer; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Eye, disease
(uveitis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT Blood vessel, disease
(vasculitis; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT 329967-85-3, Cyclooxygenase 1

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT 354145-55-4P 354145-61-2P 385369-37-9P 385369-40-4P 385369-42-6P
385369-44-8P 385369-45-9P 385369-47-1P 385369-48-2P 385369-49-3P
385369-50-6P 385369-51-7P 385369-52-8P 385369-53-9P 385369-54-0P
385369-56-2P 385369-57-3P 385369-58-4P 385369-63-1P 385369-64-2P
385369-65-3P 385369-66-4P 385369-68-6P 385369-69-7P 385369-70-0P
385369-71-1P 385369-72-2P 385369-73-3P 385369-74-4P
385369-75-5P 385369-76-6P 385369-77-7P 385369-78-8P 385369-79-9P
385369-81-3P 385369-82-4P 385369-84-6P 385369-86-8P 385369-88-0P
385369-90-4P 385369-93-7P 385424-08-8P 385800-21-5P 385800-22-6P
385800-23-7P 385800-25-9P 385800-26-0P 385800-27-1P 385800-28-2P
444753-91-7P 444753-92-8P 444753-95-1P 444753-96-2P 444753-97-3P
RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects)

IT 63-74-1 70-55-3 80-17-1 98-09-9, Benzenesulfonyl chloride 98-59-9
98-68-0 98-74-8 107-15-3, 1,2-Ethanediamine, reactions 107-21-1,
Ethylene glycol, reactions 110-63-4, 1,4-Butanediol, reactions
111-29-5, 1,5-Pentanediol 111-46-6, Diethylene glycol, reactions
124-63-0, Methanesulfonyl chloride 138-39-6 421-83-0 504-63-2,
1,3-Propanediol 505-10-2 556-48-9, 1,4-Cyclohexanediol 594-44-5,
Ethanesulfonyl chloride 625-69-4, 2,4-Pentanediol 629-11-8,
1,6-Hexanediol 699-12-7 777-44-6 1120-71-4 1633-83-6 1950-68-1
2508-29-4, 5-Aminopentanol 2580-77-0 3144-09-0, Methanesulfonamide
3446-90-0 4048-33-3, 6-Amino-1-hexanol 5271-38-5 5455-59-4
5470-49-5 10210-17-0 13325-10-5, 4-Amino-1-butanol 15307-79-6
19690-37-0 20582-85-8 26159-34-2, Naproxen sodium 78521-69-4
385369-67-5 385800-24-8 444753-90-6 444753-93-9 444753-94-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects)

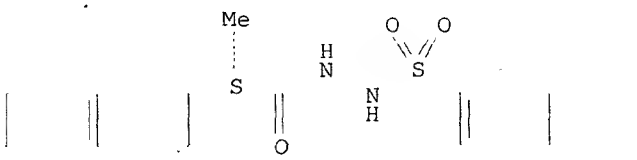
IT 16780-44-2P 87426-50-4P 106996-61-6P 120339-20-0P 126962-41-2P
156967-30-5P 156967-31-6P 184474-04-2P 214708-31-3P 354145-60-1P
385369-36-8P 385369-62-0P 385369-83-5P 385369-91-5P 385369-92-6P
385424-07-7P 385800-13-5P 385800-14-6P 385800-15-7P 385800-17-9P
385800-18-0P 385800-19-1P 385800-20-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects)

IT 22204-53-1, Naproxen
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)

IT 50-78-2, Aspirin 53-86-1, Indomethacin 54-21-7, Sodium salicylate
61-68-7, Mefenamic acid 103-90-2, Acetaminophen 552-94-3, Salsalate
2016-36-6, Choline salicylate, biological studies 5104-49-4,
Flurbiprofen 6385-02-0, Meclofenamate sodium 15307-86-5, Diclofenac
15687-27-1, Ibuprofen 18917-89-0, Magnesium salicylate 21256-18-8,
Oxaprozin 22071-15-4, Ketoprofen 22494-42-4, Diflunisal 23187-87-3,
Choline magnesium salicylate 26171-23-3, Tolmetin 31842-01-0,
Indoprofen 33005-95-7, Tiaprofenic acid 34597-40-5 36322-90-4,
Piroxicam 38194-50-2, Sulindac 41340-25-4, Etodolac 42924-53-8,
Nabumetone 51803-78-2, Nimesulide 53716-49-7, Carprofen 70374-39-9,
Lornoxicam 71125-38-7, Meloxicam 74103-07-4, Ketorolac tromethamine
80937-31-1, Flosulide
RL: ADV (Adverse effect, including toxicity); RCT (Reactant); BIOL

(Biological study); RACT (Reactant or reagent)
(prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects during therapy)
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Bjarnason, I; Gastroenterology 1993, V104, P1832 MEDLINE
(2) Carson, J; Arch Intern Med 1987, V147, P1054 MEDLINE
(3) Glaser, K; European J Pharm 1995, V281, P107 HCAPLUS
(4) Graham, D; Clin Pharmacol Ther 1985, V38, P65 MEDLINE
(5) Kaplan-Machlis, B; Annals of Pharmacotherapy 1999, V33, P979 HCAPLUS
(6) Kargman, S; Gastroenterology 1996, V111, P445 HCAPLUS
(7) Meade, E; J Biol Chem 1993, V268(9), P6610 HCAPLUS
(8) Mitchell, J; Proc Natl Acad Sci USA 1994, V90, P11693
(9) Onoe, Y; J Immunol 1996, V156, P758 HCAPLUS
(10) Sakaki; US 6177466 B1 2001 HCAPLUS
(11) Slater, D; Am J Obstet Gynecol 1995, V172, P77 HCAPLUS
(12) Soll, A; Annals of Internal Medicine 1991, V114, P307 MEDLINE
(13) Wallace, J; Gastroenterology 1997, V112, P1000 HCAPLUS
IT **385369-71-1P**
RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of prodrugs of NSAIDs contg. sulfur-contg. functional groups for alleviation of side effects)
RN 385369-71-1 HCAPLUS
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, 2-[(4-methoxyphenyl)sulfonyl]hydrazide, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L48 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:428855 HCAPLUS
DN 137:20228
TI Sulfonamido/amido/ureido-phenyl-amides as **cyclophilin** binding compounds
IN **Hamilton, Gregory S.; Belyakov, Sergei; Vaal, Mark; Wei, Ling; Wu, Yong-Qian; Steiner, Joseph P.**
PA **Guilford Pharmaceuticals Inc., USA**
SO PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM C07C233-65
ICS C07C235-24; C07C235-56; C07C275-30; C07C275-36; C07C281-06; C07C309-73; C07C311-48; C07C311-49; C07C311-51; C07C335-20; C07C333-16; C07C335-18; C07C335-42; C07C337-06; C07C337-08; C07D207-16; C07D271-10; C07D285-12; C07D333-24
CC 25-21 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1, 63**
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2002044126	A2	20020606	WO 2001-US44449	20011128
	WO 2002044126	A3	20020926		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002025767	A5	20020611	AU 2002-25767	20011128
	US 2002127605	A1	20020912	US 2001-994927	20011128
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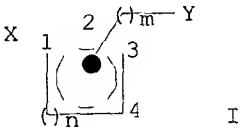
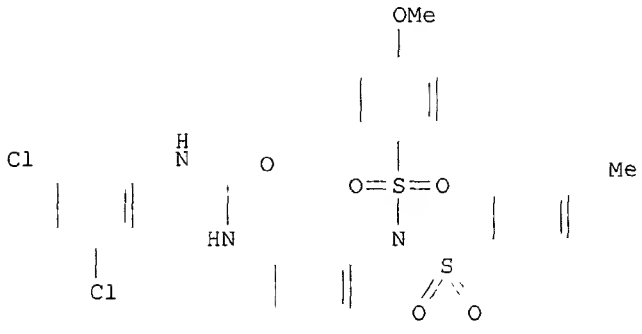


I



II

AB Title compds. I [n = 1-2 forming a central 5-6 membered (un)satd. carbocyclic ring; m = 0-3; [CH2]mY is attached to said central carbocyclic ring at position 2, 3, or 4; X, Y = carboxamide, thiocarboxamide, ureido, aminosulfonyl, etc.] were prepd. Examples include over 30 compds. synthesized, assays for rotamase inhibition, neuronal cell growth/regeneration, in-vivo protective effects in an animal model of stroke/myocardial infarction (rat) and an in-vivo model of hair growth (mouse). For instance, 3-nitroaniline was reacted with 4-methylphenylsulfonylsulfonyl chloride and 4-methoxyphenylsulfonyl chloride (DMA, Et3N) to give the bis(sulfonamide) as a solid. This intermediate was reduced (EtOHaq, NH4Cl, In.degree., reflux, 4 h) and subsequently treated with 3,5-dichlorophenylisocyanate to give II. II had IC50 = 162 nM for rotamase (a measure of **cyclophilin** (

CyP) A binding). I have an affinity for **CyP**-type **immunophilin** proteins and are useful for the treatment of neurol. disorders, hair loss disorders, ischemic disorders, and disorders caused by viral or protozoan infection.

ST sulfonamide urea formamide **cyclophilin** binding **immunophilin** prepn

IT **Cyclophilins**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(A; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Nervous system
(Guillain-Barre syndrome; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Nervous system
(Huntington's chorea; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Nervous system
(amyotrophic lateral sclerosis; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Alopecia
(areata; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Mitochondria
(blocking permeability transition pore in; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Ischemia
(bowel; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Energy metabolism, animal
(breakdown, inhibiting; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Cell death
(calcium overload, prevention; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Nervous system
(cerebellar ataxia; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Brain, disease
(cerebral cortex, trauma; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Brain, disease
(cerebrovascular; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Anesthetics
Anti-inflammatory agents
Antibiotics
(combination pharmaceutical; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Chemotherapy
(combination therapy; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Brain, disease
(concussion; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Artery, disease
(coronary; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Myelin
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(damage from laceration, compression, stretch, avulsion of peripheral nerves; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Nervous system
(degeneration; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Nerve, disease
(demyelination, central, peripheral; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Nerve, disease
(diabetic neuropathy; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Nervous system
(disease; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Metabolism, animal
(disorder, central/peripheral nervous system; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Hair preparations
(dyes, combination pharmaceutical; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Heart, disease
(failure; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Filaria
(filariasis; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Infection
(from pathogenic protozoan parasites; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Hair preparations
(growth stimulants, combination pharmaceutical; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Hemorrhage
(hematoma; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Brain, disease
(hemorrhagic stroke; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Coma
(hypoglycemic; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Kidney
Liverwort
Spleen
(infarction; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Axon
Reperfusion
Spinal cord
(injury; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Brain, disease
Heart, disease
Spinal cord
(ischemia; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Leishmania
(leishmaniasis from; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Alopecia
(male pattern; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Metabolism, animal
(mitochondrial, inhibition of; sulfonamido/amido/ureido-Ph-amides as

cyclophilin binding compds.)
IT Nervous system
(multiple system atrophy; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Anti-inflammatory agents
(nonsteroidal, chemotherapy induced hair loss, treatment; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Nervous system
(peripheral; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Eye, disease
(photoreceptor, degeneration, treatment; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Transplant and Transplantation
(reducing tissue damage; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Eye, disease
(retinopathy, Ischemic; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Blood vessel, disease
(retinopathy; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Onchocerca volvulus
(river blindness from; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Schistosoma
(schistosomiasis from; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Epilepsy
(status epilepticus; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Brain, disease
(stroke; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Alzheimer's disease
Anti-Alzheimer's agents
Anti-infective agents
Antiglaucoma agents
Antiparkinsonian agents
Cardiovascular agents
Cestoda
Edema
Eye, disease
Glaucoma (disease)
Human
Human immunodeficiency virus
Malaria
Multiple sclerosis
Nematoda
Parkinson's disease
Pinworm
Wilson's disease
(sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT **Cyclophilins**
Immunophilins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Multiple sclerosis
(therapeutic agents; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)

IT Toxoplasma gondii
(toxoplasmosis from; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Brain, disease
(trauma; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Infection
(trypanosomiasis; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Infection
(viral, neuropathy assocd. with; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT Adrenoceptor antagonists
(.beta.-, chemotherapy induced hair loss, treatment; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT 59-05-2, Methotrexate
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(chemotherapy induced hair loss, treatment; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT 50-18-0, Cyclophosphamide 50-76-0, Dactinomycin 51-21-8, 5-Fluorouracil 57-22-7, Vincristine 3778-73-2, Ifosfamide 11056-06-7, Bleomycin 15663-27-1, Cisplatin 33069-62-4, Taxol 33419-42-0, Etoposide 41575-94-4, Carboplatin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT 1995-43-3P 433976-82-0P, N-[3,5-Dichlorophenyl]-N'-[3-[[[4-methoxyphenyl]sulfonyl][[4-methylphenyl]sulfonyl]amino]phenyl]urea 433976-83-1P 433976-84-2P 433976-85-3P 433976-86-4P, Bis[[3,5-dichlorophenyl]sulfonyl][3-[[[naphthylamino]thioxomethyl]amino]phenyl]amine 433976-87-5P 433976-88-6P 433976-89-7P 433976-90-0P 433976-91-1P 433976-92-2P 433976-93-3P 433976-94-4P 433976-95-5P 433976-96-6P 433976-97-7P 433976-98-8P 433976-99-9P 433977-00-5P 433977-01-6P 433977-02-7P 433977-03-8P 433977-04-9P 433977-05-0P 433977-06-1P 433977-07-2P 433977-08-3P 433977-09-4P 433977-10-7P 433977-11-8P 433977-12-9P 433977-13-0P 433977-14-1P 433977-15-2P 433977-16-3P 433977-17-4P 433977-18-5P 433977-19-6P 433977-20-9P 433977-21-0P 433977-22-1P 433977-23-2P 433977-24-3P 433977-25-4P **433977-26-5P** 433977-27-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; prepn. of 1,3-disubstituted sulfonamido/amido/ureido-Ph-amides as **immunophilin** ligands)
IT 95076-93-0, Rotamase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitor; sulfonamido/amido/ureido-Ph-amides as **cyclophilin** binding compds.)
IT 6398-87-4P 17722-36-0P 79023-02-2P 95425-81-3P, 3-[2,2-Bis(chlorophenyl)ethenyl]phenylamine 106109-72-2P 333440-82-7P 433977-30-1P 433977-31-2P 433977-32-3P, N-(3,5-Dichlorophenyl)-2-(3-nitrophenoxy)acetamide 433977-33-4P, N-(3,5-Dichlorophenyl)-2-(3-aminophenoxy)acetamide 433977-34-5P, 2,3,4,5,6-Pentafluorobenzenesulfonic acid 3-aminophenyl ester 433977-35-6P, 3-((3,5-Di(trifluoromethyl)benzyl)oxy)benzoic hydrazide 433977-36-7P 433977-37-8P 433977-38-9P 433977-40-3P 433977-41-4P 433977-42-5P 433977-43-6P, 4-((5-Phenylpentanoyl)amino)benzhydrazide 433977-44-7P 433977-45-8P, N-[3-Aminobenzenesulfonyl]-N'-[tert-butyloxycarbonyl]hydrazine 433977-46-9P, N-[[3-[[5-Phenylpentanoyl]amino]benzene]sulfonyl]-N'-[tert-butyloxycarbonyl]hydrazine 433977-47-0P 433977-48-1P, 3-[6-Phenylhexanoylamino]benzoic acid 433977-49-2P 433977-50-5P

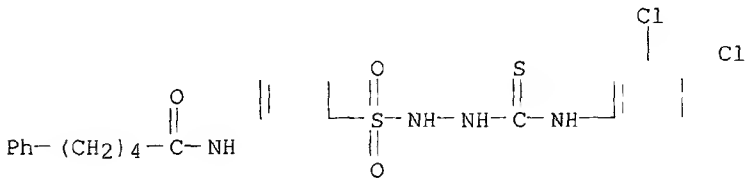
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of 1,3-disubstituted sulfonamido/amido/ureido-Ph-amides as **immunophilin** ligands)

IT 433977-51-6 433977-52-7 433977-53-8 433977-54-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 1,3-disubstituted sulfonamido/amido/ureido-Ph-amides as **immunophilin** ligands)

IT 95-76-1, 3,4-Dichloroaniline 98-18-0, 3-Aminobenzenesulfonamide 99-06-9, 3-Hydroxybenzoic acid, reactions 99-09-2, 3-Nitroaniline 99-61-6, 3-Nitrobenzaldehyde 102-36-3, 3,4-Dichlorophenylisocyanate 121-51-7, 3-Nitrobenzenesulfonyl chloride 401-81-0, 3-Iodobenzotrifluoride 530-50-7, N,N-Diphenylhydrazine 582-33-2, 3-Aminobenzoic acid ethyl ester 591-19-5, 3-Bromoaniline 591-27-5, 3-Aminophenol 619-45-4, Methyl 4-aminobenzoate 626-43-7, 3,5-Dichloroaniline 705-21-5, 3,5-Dichlorophenylsulfonyl chloride 832-53-1, Pentafluorobenzenesulfonyl chloride 870-46-2, tert-Butylcarbazate 1436-59-5, cis-1,2-Diaminocyclohexane 1878-88-2, 3-(Nitrophenoxy)acetic acid 2133-40-6, L-Proline methyl ester hydrochloride 2270-20-4, 5-Phenylpentanoic acid 2905-62-6, 3,5-Dichlorobenzoyl chloride 3586-12-7, 3-Phenoxyaniline 4411-26-1 4518-10-9, Methyl 3-aminobenzoate 5581-75-9, 6-Phenylhexanoic acid 6590-93-8, 3,5-Dichlorophenylisothiocyanate 6590-94-9, 1,2-Dichloro-4-isothiocyanatobenzene 6952-67-6, 2-(3-Nitrophenyl)-1,3-dioxolane 14062-34-1, 3-Aminobenzoic acid hydrazide 16588-74-2 20371-41-9, 5-Phenylpentanoyl chloride 23165-29-9 31834-96-5, Hexynoic acid 32247-96-4, 3,5-Bis(trifluoromethyl)benzyl bromide 37517-81-0 161660-94-2 433977-28-7 433977-29-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of 1,3-disubstituted sulfonamido/amido/ureido-Ph-amides as **immunophilin** ligands)

IT **433977-26-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; prepn. of 1,3-disubstituted sulfonamido/amido/ureido-Ph-amides as **immunophilin** ligands)

RN 433977-26-5 HCAPLUS
CN Benzenesulfonic acid, 3-[(1-oxo-5-phenylpentyl)amino]-, 2-[[(3,4-dichlorophenyl)amino]thioxomethyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:11099 HCAPLUS
DN 136:69597
TI Synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors
IN Craig, Richard A.; Kawai, Megumi; Lynch, Linda M.; Patel, Jyoti R.; Sheppard, George S.; Wang, Jieyi; Yang, Fan; Ba-Maung, Nwe
PA USA
SO U.S. Pat. Appl. Publ., 78 pp.
CODEN: USXXCO
DT **Patent**

LA English
IC ICM A61K031-47
ICS A61K031-166; C07C243-10; C07D215-38
NCL 514159000
CC 23-18 (Aliphatic Compounds)
Section cross-reference(s): **1**, **25**, 34
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002002152	A1	20020103	US 2001-833917	20010412
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OS MARPAT 136:69597
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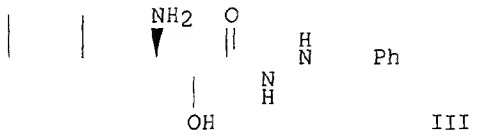

AB Title compds. I [R1 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocycle)alkyl, R5S-alkylene; R3 = H, alkyl, arylalkyl; R4 = NR6R7, OR8; R5 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl; R6-7 = H, alkanoyl, alkenyl, alkenyloxyalkyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylthioalkyl, aryl, arylalkanoyl, etc.; or R6-7 together are arylalkylidene; or R6-7 together with the nitrogen atom to which they are attached, form a heterocycle; R8 = H, alkanoylalkyl, alkenyl, alkoxycarbonylalkyl, alkyl, amidoalkyl, aryl, arylalkyl, etc.; R9-10 = H, alkyl, aryl] were prepd. Over 450 synthetic examples were reported. For instance, (2R)-2-(Boc)amino-3-cyclohexylpropanoic acid was reduced to the corresponding alc. (PhMe, Red-Al, 0.degree.C, room temp. 1 h) and oxidized to II (DMSO, Py.bul.SO3, Et3N, room temp. 30 min). II was converted to the bisulfite addn. product (H2O, NaHSO3, 5.degree.C, 24 h) and reacted with KCN to give the .alpha.-hydroxy nitrile intermediate which was hydrolyzed to the carboxylic acid (12 N HCl, reflux, 21 h) and converted to III by condensation with benzylhydrazine (DCM/DMA, DIC, NMM, HOBt). Selected compds. I had IC50 < 0.1 .mu.M for MetAP2. I are useful for inhibiting angiogenesis.

ST hydrazide alkoxyamide angiogenesis inhibitors metap2 prepn
IT Angiogenesis inhibitors
(synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)
IT 369355-67-9P 369355-68-0P 369355-69-1P 369355-70-4P 369355-71-5P
369355-72-6P 369355-73-7P 369355-74-8P **369355-75-9P**
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369356-56-9P 369356-57-0P 369356-58-1P 369356-59-2P 369356-60-5P
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369356-66-1P 369356-67-2P 369356-68-3P 369356-69-4P 369356-70-7P
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369356-76-3P 369356-77-4P 369356-78-5P 369356-79-6P 369356-80-9P
369356-81-0P 369356-82-1P 369356-83-2P 369356-84-3P 369356-85-4P
369356-86-5P 369356-87-6P 369356-88-7P 369356-89-8P 369356-90-1P
369356-91-2P 369356-92-3P 369356-93-4P 369356-94-5P 369356-95-6P
369356-96-7P 369356-97-8P 369356-98-9P 369356-99-0P 369357-00-6P
369357-01-7P 369357-02-8P 369357-03-9P 369357-04-0P 369357-05-1P
369357-06-2P 369357-07-3P 369357-08-4P 369357-09-5P 369357-10-8P
369357-11-9P 369357-12-0P 369357-13-1P 369357-14-2P 369357-15-3P
369357-16-4P 369357-17-5P 369357-18-6P 369357-19-7P 369357-20-0P
369357-21-1P 369357-22-2P 369357-23-3P 369357-24-4P 369357-25-5P
369357-26-6P 369357-27-7P 369357-28-8P 369357-29-9P 369357-30-2P
369357-32-4P 369357-34-6P 369357-36-8P 369357-38-0P 369357-40-4P
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369357-93-7P 369357-94-8P 369357-95-9P 369357-96-0P 369357-97-1P
369357-98-2P 369357-99-3P 369358-00-9P 369358-01-0P 369358-02-1P
369358-03-2P 369358-04-3P 369358-05-4P 369358-06-5P 369358-07-6P
369358-08-7P 369358-09-8P 369358-10-1P 369358-11-2P 369358-12-3P
369358-13-4P 369358-14-5P 369358-15-6P 369358-16-7P 369358-17-8P
369358-18-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 369358-19-0P 369358-20-3P 369358-21-4P 369358-22-5P 369358-23-6P
369358-24-7P 369358-25-8P 369358-26-9P 369358-27-0P 369358-28-1P
369358-29-2P 369358-30-5P 369358-31-6P 369358-32-7P 369358-33-8P
369358-34-9P 369358-35-0P 369358-37-2P 369358-38-3P 369358-40-7P
369358-41-8P 369358-42-9P 369358-43-0P 369358-44-1P 369358-45-2P
369358-46-3P 369358-48-5P 369358-50-9P 369358-52-1P 369358-53-2P
369358-54-3P 369358-55-4P 369358-57-6P 369358-59-8P 369358-60-1P
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369358-66-7P 369358-67-8P 369358-68-9P 369358-69-0P 369358-70-3P
369358-71-4P 369358-72-5P 369358-73-6P 369358-74-7P 369358-75-8P
369358-76-9P 369358-77-0P 369358-78-1P 369358-79-2P 369358-80-5P
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369360-16-7P 369360-17-8P 369360-18-9P 369360-19-0P 369360-20-3P
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369360-26-9P 369360-27-0P 369360-28-1P 369360-29-2P 369360-30-5P
369360-31-6P 369360-32-7P 369360-33-8P 369360-34-9P 369360-35-0P
369360-36-1P 369360-37-2P 369360-38-3P 369360-39-4P 369360-40-7P
369360-41-8P 369360-42-9P 369360-43-0P 369360-44-1P 369360-45-2P
369360-46-3P 369360-47-4P 369360-48-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 585-71-7P 18328-11-5P, Benzenebutanal 39684-80-5P,
N-(tert-Butoxycarbonyl)-2-bromoethylamine 52245-11-1P 58634-67-6P
67032-33-1P, Methyl 3-(2,3-dihydroxypropyloxy)benzoate 68432-92-8P,
Methyl 3-(cyanomethyl)benzoate 71925-14-9P 79250-46-7P, Methyl
3-(prop-2-enyloxy)benzoate 110238-61-4P 129593-17-5P 148433-10-7P,
Methyl 3-propoxybenzoate 160820-17-7P 172789-09-2P 339592-56-2P
360788-02-9P, 3-(3-Indolyl)propanal 369360-49-6P 369360-50-9P
369360-51-0P 369360-52-1P 369360-53-2P 369360-54-3P 369360-55-4P
369360-56-5P 369360-57-6P 369360-58-7P 369360-59-8P 369360-60-1P
369360-61-2P 369360-62-3P 369360-63-4P 369360-64-5P 369360-65-6P
369360-66-7P 369360-67-8P 369360-68-9P 369360-69-0P 369360-70-3P
369360-71-4P 369360-72-5P, Ethyl 4-ethyloct-2-enoate 369360-73-6P
369360-74-7P 369360-75-8P 369360-76-9P 369360-77-0P 369360-78-1P
369360-79-2P 369360-80-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 50-45-3, 2,3-Dichlorobenzoic acid 50-79-3, 2,5-Dichlorobenzoic acid
50-84-0, 2,4-Dichlorobenzoic acid 51-36-5, 3,5-Dichlorobenzoic acid
51-44-5, 3,4-Dichlorobenzoic acid 51-71-8, 1-(2-Phenethyl)hydrazine
55-22-1, 4-Pyridinecarboxylic acid, reactions 64-04-0,
2-Phenylethylamine 69-72-7, 2-Hydroxybenzoic acid, reactions 74-11-3,
4-Chlorobenzoic acid 75-26-3, 2-Bromopropane 78-77-3,
1-Bromo-2-methylpropane 79-31-2, 2-Methylpropionic acid 86-55-5,
1-Naphthoic acid 86-87-3, 1-Naphthylacetic acid 88-13-1,
3-Thiophenecarboxylic acid 88-14-2, Furan-2-carboxylic acid 88-65-3,
2-Bromobenzoic acid 91-40-7, N-Phenylanthranilic acid 91-52-1,
2,4-Dimethoxybenzoic acid 93-07-2, 3,4-Dimethoxybenzoic acid 93-25-4,

2-Methoxyphenylacetic acid 94-53-1, 1,3-Benzodioxole-5-carboxylic acid 98-73-7, 4-tert-Butylbenzoic acid 98-85-1 98-89-5, Cyclohexanecarboxylic acid 98-97-5, 2-Pyrazine carboxylic acid 98-98-6, 2-Pyridinecarboxylic acid 99-04-7, 3-Methylbenzoic acid 99-05-8, 3-Aminobenzoic acid 99-06-9, 3-Hydroxybenzoic acid, reactions 99-64-9, 3-Dimethylaminobenzoic acid 99-94-5, 4-Methylbenzoic acid 99-96-7, 4-Hydroxybenzoic acid, reactions 100-09-4, 4-Methoxybenzoic acid 100-63-0, 1-Phenylhydrazine 103-82-2, Phenylacetic acid, reactions 104-01-8, 4-Methoxyphenylacetic acid 104-88-1, 4-Chlorobenzaldehyde, reactions 106-94-5, 1-Bromopropane 111-14-8, Heptanoic acid 118-41-2, 3,4,5-Trimethoxybenzoic acid, reactions 118-90-1, 2-Methylbenzoic acid 118-91-2, o-Chlorobenzoic acid 118-92-3, 2-Aminobenzoic acid 134-11-2, 2-Ethoxybenzoic acid 150-13-0, 4-Aminobenzoic acid 349-46-2, D-Cystine 368-78-5 368-90-1, 1-[4-(Trifluoromethyl)phenyl]hydrazine 371-14-2, 1-(4-Fluorophenyl)hydrazine 445-29-4, 2-Fluorobenzoic acid 454-92-2, 3-(Trifluoromethyl)benzoic acid 455-24-3, 4-(Trifluoromethyl)benzoic acid 455-38-9, 3-Fluorobenzoic acid 456-22-4, 4-Fluorobenzoic acid 488-93-7, Furan-3-carboxylic acid 499-06-9, 3,5-Dimethylbenzoic acid 501-81-5, 3-Pyridylacetic acid 503-74-2, 3-Methylbutyric acid 524-38-9, N-Hydroxyphthalamide 527-72-0, 2-Thiophenecarboxylic acid 530-50-7 536-40-3, 4-Chlorobenzohydrazide 536-66-3, 4-Isopropylbenzoic acid 537-47-3, N-Phenylhydrazinecarboxamide 539-44-6, 1-(4-Methylphenyl)hydrazine 556-08-1, 4-Acetamidobenzoic acid 579-75-9, o-Anisic acid 581-96-4, 2-Naphthylacetic acid 585-76-2, 3-Bromobenzoic acid 586-38-9, 3-Methoxybenzoic acid 586-76-5, 4-Bromobenzoic acid 589-21-9, 1-(4-Bromophenyl)hydrazine 593-56-6, O-Methylhydroxylamine hydrochloride 603-79-2, 2,3-Dimethylbenzoic acid 610-72-0, 2,5-Dimethylbenzoic acid 611-01-8, 2,4-Dimethylbenzoic acid 612-35-1, .alpha.-Phenyl-o-toluic acid 613-94-5, Benzohydrazide 615-21-4 618-40-6, 1-Methyl-1-phenylhydrazine 619-04-5, 3,4-Dimethylbenzoic acid 619-64-7, 4-Ethylbenzoic acid 619-65-8, 4-Cyanobenzoic acid 619-84-1, 4-Dimethylaminobenzoic acid 619-86-3, 4-Ethoxybenzoic acid 622-36-6, 1-(2-Methylphenyl)hydrazine 634-97-9, 2-Pyrrole carboxylic acid 636-10-2, 1-(3-Methylbutyl)-1-phenylhydrazine 636-44-2, 2,5-Dimethyl-3-furoic acid 636-97-5, 4-Nitrobenzohydrazide 637-80-9, Ethyl hydrazinoacetate 644-21-3, 1-Ethyl-1-phenylhydrazine 658-27-5, 1-(3-Fluorophenyl)hydrazine 699-90-1, 3-Fluoro-2-methylbenzoic acid 771-61-9, Pentafluorophenol 825-99-0, 3-(Methylthio)benzoic acid 830-96-6, 1H-Indole-3-propanoic acid 867-13-0, Triethyl phosphonoacetate 870-46-2, tert-Butyl hydrazinecarboxylate 1014-81-9, 3-(Trifluoromethoxy)benzoic acid 1073-69-4, 1-(4-Chlorophenyl)hydrazine 1115-59-9, L-Alanine ethyl ester hydrochloride 1123-00-8, Cyclopentylacetic acid 1129-28-8, Methyl 3-(bromomethyl)benzoate 1132-21-4, 3,5-Dimethoxybenzoic acid 1438-16-0, 3-Amino-2-thioxo-1,3-thiazolidin-4-one 1452-63-7 1498-96-0, 4-Butoxybenzoic acid 1521-38-6, 2,3-Dimethoxybenzoic acid 1538-08-5 1576-35-8, 4-Methylphenylsulfonylhydrazine 1621-91-6, 1H-Pyrazole-5-carboxylic acid 1673-47-8, 3-Chlorobenzohydrazide 1798-09-0, 3-Methoxyphenylacetic acid 1821-12-1, 4-Phenylbutyric acid 1877-72-1, 3-Cyanobenzoic acid 1878-65-5, 3-Chlorophenylacetic acid 1878-66-6, 4-Chlorophenylacetic acid 1918-79-2, 5-Methylthiophene-2-carboxylic acid 2164-61-6, 3-Pyridazine carboxylic acid 2213-43-6, 1-Aminopiperidine 2215-77-2, 4-Phenoxybenzoic acid 2243-55-2, 1-Naphthylhydrazine 2361-27-5, 2-Thiophenecarbohydrazide 2368-80-1, 1-(2-Fluorophenyl)hydrazine 2438-05-3, 4-n-Propylbenzoic acid 2444-36-2, 2-Chlorophenylacetic acid 2550-36-9, (Bromomethyl)cyclohexane 2576-47-8, 2-Bromoethylamine hydrobromide 2687-43-6, O-Benzylhydroxylamine hydrochloride 2785-98-0, 2,5-Dimethoxybenzoic acid 3235-69-6, 4-Morpholineacetic acid 3332-29-4, O-Ethylhydroxylamine hydrochloride 3400-45-1, Cyclopentanecarboxylic acid 3438-16-2, 5-Chloro-2-methoxybenzoic acid 3471-32-7, 1-(4-Methoxyphenyl)hydrazine 3619-22-5, 4-Methylbenzohydrazide 3839-22-3, 2-Cyanobenzoic acid 3919-73-1,

O-(Carboethoxy)methylhydroxylamine hydrochloride 3973-08-8, 4-Thiazole carboxylic acid 4052-30-6, 4-(Methylsulfonyl)benzoic acid 4361-28-8, 3-Cyclohexylpropanal 4392-54-5, 4-Hydrazinobenzenesulfonamide 4519-39-5, 2,3-Difluorobenzoic acid 4761-00-6, 2,4,6-Trimethylbenzyl bromide 4846-21-3, O-Phenylhydroxylamine 4890-85-1, 2-Bibenzylcarboxylic acid 4930-98-7, 2-Hydrazinopyridine 5042-30-8, 1-(2,2,2-Trifluoroethyl)hydrazine 5292-21-7, Cyclohexylacetic acid 5331-43-1, Benzyl carbazate 5341-58-2, 3-Hydroxy-2-naphthoylhydrazine 5409-31-4, 3,4-Diethoxybenzoic acid 5429-28-7, 4-(Diethylamino)benzoic acid 5438-19-7, 4-Propoxybenzoic acid 5537-74-6, 3-(Ethylthio)benzoic acid 5728-52-9, 4-Phenylphenylacetic acid 5785-06-8, 3-Methoxybenzohydrazide 5814-05-1, 2-Chlorobenzohydrazide 5818-06-4, 3-Hydroxybenzoyl hydrazide 6027-14-1, D-Homocysteine 6084-58-8, O-Isobutylhydroxylamine hydrochloride 6092-80-4, O-Phenylhydroxylamine hydrochloride 6498-34-6, 1-Cyclohexylhydrazine 6638-79-5, N,O-Dimethylhydroxylamine hydrochloride 6688-11-5, Cyclooctanealdehyde 6973-60-0, 1-Methylpyrrole-2-carboxylic acid 7466-54-8, 2-Methoxybenzohydrazide 10449-07-7, 1-(2-Chlorophenyl)hydrazine 13050-47-0, 3-Methylbenzohydrazide 13115-43-0, 2-Pyridylacetic acid 13116-27-3, 1-(4-Iodophenyl)hydrazine 13205-46-4, 4-Isopropoxybenzoic acid 13205-48-6, 4-Methylthiobenzoic acid 13205-49-7, 4-(Ethylthio)benzoic acid 13205-50-0, 4-(Isopropylthio)benzoic acid 13221-86-8, 2,4-Dihydroxybenzohydrazide 13636-54-9, 1-Mesitylhydrazine 13957-54-5 14190-59-1, 2-Thiazole carboxylic acid 14527-41-4, 5-Thiazolecarboxylic acid 14763-20-3, 1-(3-Chlorophenyl)hydrazine 15384-39-1, 1-(3-Methoxyphenyl)hydrazine 16182-15-3 16596-41-1, 1-Pyrrolidinamine 16874-33-2, 2-Tetrahydrofuroic acid 17078-28-3, 4-Dimethylaminophenylacetic acid 17284-97-8, 3-Chloro-6-hydrazinopyridazine 17894-25-6, 2,5-Dimethoxybenzohydrazide 19275-55-9 19438-10-9, Methyl 3-hydroxybenzoate 20570-96-1 21169-71-1, 5-Isoxazolecarboxylic acid 22026-39-7 22683-48-3, 4-(Propylthio)benzoic acid 22683-49-4, 4-(Butylthio)benzoic acid 22683-51-8, 4-(Hexylthio)benzoic acid 22855-95-4, 4-(Benzylthio)benzoic acid 23806-24-8, 3-Methylthiophene-2-carboxylic acid 23834-14-2, 7-Chloro-4-hydrazinoquinoline 25503-90-6, 1-Acetylpiperidine-4-carboxylic acid 28356-58-3, 4-Pyridylacetic acid 30923-92-3, 1-(Cyclopentyl)hydrazine 30963-12-3, 2-(1-Methylhydrazino)-3-nitropyridine 31462-59-6, 4-Pyrimidine carboxylic acid 31719-76-3, 4-(Phenoxymethyl)benzoic acid 32443-99-5, D-Cysteine hydrochloride 32910-52-4, 4-(Cyclohexylthio)benzoic acid 32910-56-8, 4-(4-Methylpentylthio)benzoic acid 32910-70-6, 4-(2-Cyclohexylethylthio)benzoic acid 36239-09-5, Ethyl-3-chloro-3-oxo propionate 36331-57-4, Benzylsulfonylhydrazine 37718-11-9, 1H-Pyrazole-4-carboxylic acid 37860-70-1, 2,3-Diethoxybenzoic acid 38945-21-0, O-Allylhydroxylamine hydrochloride 39115-96-3, 3-Bromobenzohydrazide 39627-84-4, 2-Naphthoylhydrazine 39684-28-1, O-tert-Butylhydroxylamine hydrochloride 39943-56-1, 1-(3,5-Dichlorophenyl)hydrazine 40594-30-7, 1-(2,4-Difluorophenyl)hydrazine 40887-80-7, 1-(3-Bromophenyl)hydrazine 43038-45-5, 1-Naphthoylhydrazine 46230-31-3, O-(Carbobenzyloxy)methylhydroxylamine 51304-65-5, 1-(3-Chloro-4-methylphenyl)hydrazine 51421-13-7, 1-(2-Chlorobenzyl)hydrazine 51546-12-4, 2-Chloro-5-(methylthio)benzoic acid 51707-38-1, 3,5-Dimethoxybenzohydrazide 53516-97-5, 3-Chlorophenylsulfonylhydrazine 53551-35-2, 4-(2-Methylpropylthio)benzoic acid 54699-92-2 58586-81-5, 4-Ethoxybenzohydrazide 58791-94-9, 1-(4-Chloro-2-methylphenyl)hydrazine 59983-39-0, (2S)-2-(Methoxymethyl)-1-pyrrolidinamine 60739-40-4, 3-(Benzylthio)benzoic acid 61645-34-9, 2-Hydrazinoquinoxaline 61715-74-0, 1-Propyl-1-phenylhydrazine 62524-21-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 63693-65-2, 1-(4-Isopropylphenyl)hydrazine 65227-54-5,

1-Naphthylsulfonylhydrazine 66971-55-9, 5-Hydrazino-1,3-dimethyl-4-nitro-1H-pyrazole 67487-35-8, 2,5-Dichlorobenzohydrazide 70491-05-3, (2R)-2-[(tert-Butoxycarbonyl)amino]-2-(cyclohexyl)ethanoic acid 71056-18-3, 1-(Cyclopropylmethyl)-1-phenylhydrazine 72748-99-3, (2R)-2-(Methoxymethyl)-1-pyrrolidinamine 73469-90-6 75681-13-9, Methyl 3-hydrazino-2-thiophenecarboxylate 76953-33-8, 3-Chloro-6-(1-methylhydrazino)pyridazine 79786-62-2, 1-Octyl-1-phenylhydrazine 82732-07-8, (2R)-2-[(tert-Butoxycarbonyl)amino]-4-phenylbutanoic acid 83823-06-7, 6-Chloro(2H)-1-benzopyran-3-carboxylic acid 84282-78-0, 3-Chloro-4-fluorophenylhydrazine 88561-15-3, 1-Hexyl-1-phenylhydrazine 89364-31-8 96017-23-1, 4-Chloro-2-methyl-5-(1-methylhydrazino)-3(2H)-pyridazinone 97108-50-4, 1-(2,5-Difluorophenyl)hydrazine 104636-55-7, 1-(3-Phenylpropyl)-1-phenylhydrazine 106087-14-3, 1-(2-Methylpropyl)-1-phenylhydrazine 108329-74-4, (2R)-2-[(tert-Butoxycarbonyl)amino]-4-(ethylthio)butanoic acid 110208-00-9, 3-(Propylthio)benzoic acid 114670-74-5 114838-12-9, 3-(Isopropylthio)benzoic acid 127095-92-5, (2R)-2-[(tert-Butoxycarbonyl)amino]-3-cyclohexylpropanoic acid 140853-10-7 163620-24-4, 2-(1-Methylhydrazino)-5-(trifluoromethyl)pyridine 170162-56-8, 3-(Butylthio)benzoic acid 172516-47-1 175137-28-7, Methyl 2-hydrazino-4-(trifluoromethyl)-5-pyrimidinecarboxylate 175137-33-4 175276-74-1, 1-(2-Chloro-6-fluorophenyl)hydrazine 207974-22-9, N-(4-Chloro-2-methoxyphenyl)hydrazinecarboxamide 240407-62-9 369360-81-6 369360-82-7 369360-83-8 369360-84-9, 1-Pentyl-1-phenylhydrazine 369360-85-0, 1-(2-Methylbutyl)-1-phenylhydrazine 369360-86-1, 1-(2-Methylpentyl)-1-phenylhydrazine 369360-87-2, 1-(3-Methylpentyl)-1-phenylhydrazine 369360-88-3, 1-(3,3-Dimethylbutyl)-1-phenylhydrazine 369360-89-4, 1-(2-Ethylbutyl)-1-phenylhydrazine 369360-90-7, 1-Dodecyl-1-phenylhydrazine 369360-91-8, 1-(3,5,5-Trimethylhexyl)-1-phenylhydrazine 369360-92-9, 1-(2-Benzyloxyethyl)-1-phenylhydrazine 369360-93-0, 1-(2,2,5-Trichloropentyl)-1-phenylhydrazine 369360-94-1, 1-Heptyl-1-phenylhydrazine 369360-95-2, 1-[3-(Methylthio)propyl]-1-phenylhydrazine 369360-96-3, 1-(Cyclopentylmethyl)-1-phenylhydrazine 369360-97-4, 1-(5-Hydroxypentyl)-1-phenylhydrazine 369360-98-5, 1-((2R)-2,3-Dihydroxypropyl)-1-phenylhydrazine 369360-99-6, 1-(2,2-Dichlorohexyl)-1-phenylhydrazine 369361-00-2, 1-(7-Methoxy-3,7-dimethyloctyl)-1-phenylhydrazine 369361-01-3, 1-[2-(4-Methylphenyl)ethyl]-1-phenylhydrazine 369361-02-4, 1-(2-Ethylhexyl)-1-phenylhydrazine 369361-03-5, 1-[2-(4-Chlorophenyl)-2-cyanoethyl]-1-phenylhydrazine 369361-04-6, 1-(2-Phenylpropyl)-1-phenylhydrazine 369361-05-7, 1-(Cyclooctylmethyl)-1-phenylhydrazine 369361-06-8, 1-[(11Z)-1-Hexadecenyl]-1-phenylhydrazine 369361-07-9, 1-Tridecyl-1-phenylhydrazine 369361-08-0, 4-(1-Phenylhydrazino)butanoic acid 369361-09-1, 1-((6Z)-6-Nonenyl)-1-phenylhydrazine 369361-10-4, 1-((4Z)-4-Decenyl)-1-phenylhydrazine 369361-11-5, 1-(4-Pentenyl)-1-phenylhydrazine 369361-12-6, 1-(3,7-Dimethyl-6-octenyl)-1-phenylhydrazine 369361-13-7, 1-(4,4,4-Trifluorobutyl)-1-phenylhydrazine 369361-14-8, 1-(3-Hydroxybutyl)-1-phenylhydrazine 369361-15-9, 1-[2-[(3,7-Dimethyl-6-octenyl)oxy]ethyl]-1-phenylhydrazine 369361-16-0, 1-[2-(3,3-Dimethylcyclohexyl)ethyl]-1-phenylhydrazine 369361-17-1, 1-((4S)-6-Bromo-4-methylhexyl)-1-phenylhydrazine 369361-18-2, 1-Cyclohexylmethyl-1-phenylhydrazine 369361-19-3, 3-(Hexylthio)benzoic acid 369361-20-6, 3-(2-Methylpropylthio)benzoic acid 369361-21-7, 3-(4-Methylpentylthio)benzoic acid 369361-22-8, 3-(1-Methylpropylthio)benzoic acid 369361-23-9, 3-(2,2-Dimethylpropylthio)benzoic acid 369361-24-0, 3-(Cyclohexylthio)benzoic acid 369361-25-1, 3-(2-Cyclohexylethylthio)benzoic acid 369361-26-2, 3-(2-Phenylethylthio)benzoic acid 369361-27-3, 3-(3-Phenylpropylthio)benzoic acid 369361-28-4 369361-29-5, 4-(1-Methylpropylthio)benzoic acid 369361-30-8, 4-(2,2-Dimethylpropylthio)benzoic acid 369361-31-9, 4-(2-Phenylethylthio)benzoic acid 369361-32-0, 4-(3-Phenylpropylthio)benzoic acid 369361-33-1

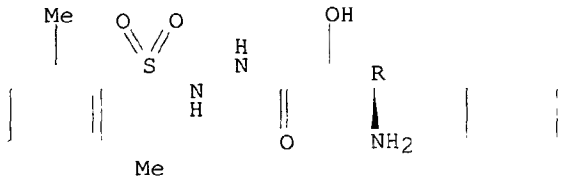
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 61229-81-0, Methionine aminopeptidase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type 2; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT **369355-75-9P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

RN 369355-75-9 HCAPLUS
CN Cyclohexanebutanoic acid, .beta.-amino-.alpha.-hydroxy-, 2-[(2,4,6-trimethylphenyl)sulfonyl]hydrazide, (.beta.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L48 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:10229 HCAPLUS
DN 136:85672
TI Modified forms of pharmacologically active agents for use as nonsteroidal anti-inflammatory drugs (NSAIDs)
IN Lai, Ching-san; Wang, Tingmin
PA Medinox, Inc., USA
SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM A61K
CC 25-24 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): 1, 27, **63**

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002000167	A2	20020103	WO 2001-US19750	20010619
	WO 2002000167	A3	20020404		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6355666	B1	20020312	US 2000-602688	20000623
	US 6429223	B1	20020806	US 2000-715767	20001117
	AU 2001070010	A5	20020108	AU 2001-70010	20010619
PRAI	US 2000-602688	A1	20000623		

US 2000-715767 A1 20001117
WO 2001-US19750 W 20010619
OS MARPAT 136:85672
GI

I

AB In accordance with the present invention, there are provided modified forms of nonsteroidal anti-inflammatory drugs (NSAIDs), X-L-Z [X = non-steroidal anti-inflammatory drug (NSAID); L = optional linker/spacer, WR; Z = sulfur-contg. functional group contg. an (un)substituted hydrocarbon; R = (un)substituted alkylene, cycloalkylene, heterpcyclic, oxyalkylene, alkenylene, arylene, alkarylene; W = ester, reverse ester, thioester, reverse thioester, amide, reverse amide, phosphate, phosphonate, imine, enamine]. Thus, naproxen (I; R = H) was esterified with propane-1,3-diol in CHCl3 contg. catalytic p-tosic acid followed by sulfonation with tosyl chloride in pyridine to give prodrug I [R = (CH2)3OSO2C4H4Me-4 (II)]. Modified NSAIDs according to the invention provide a new class of anti-inflammatory agent which provides the therapeutic benefits of NSAIDs while causing a much lower incidence of side-effects then typically obsd. with such agents. Thus, prodrug II substantially reduced GI toxicity (15% that of naproxen) while maintaining efficacy in anti-inflammation activity in both acute and chronic inflammation in animal models [e.g., rat carrageenan-induced hindlimb edema, P = 0.78 .+-. 0.04 (4 h) and P = 0.93 .+-. 0.04 (5 h)].

ST NSAID modified prepn therapeutic benefit reduced side effect; nonsteroidal antiinflammatory drug modified prepn reduced side effect; naproxen sodium modified prepn

IT Sulfones
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(C1-10-alkyl and aryl; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Drug delivery systems
(dispersions; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Toxicity
(drug, side-effect redn.; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Drug delivery systems
(emulsions; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Drug delivery systems
(enteric; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Drug delivery systems
(liposomes; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Drug delivery systems
(micelles; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT Analgesics
Antiarthritics
Pharmacokinetics
(modification of pharmacol. active agents for use as nonsteroidal

anti-inflammatory drugs)
IT Anti-inflammatory agents
(nonsteroidal; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Drug delivery systems
(prodrugs; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Digestive tract
(reduced toxicity; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Sulfonamides
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(reverse; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Sulfonic acids, preparation
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(salts, C1-10-alkyl and aryl; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Sulfinic acids
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(salts, reverse; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Drug delivery systems
(solids; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Drug delivery systems
(solns.; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Functional groups
(sulfur-contg. groups; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT Digestive tract
(ulcer, side-effect redn.; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT 329967-85-3, COX-1
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition; modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT 354145-55-4P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT 22204-53-1, Naproxen
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)
IT 63-74-1, 4-Aminobenzenesulfonamide 70-55-3, p-Methylbenzenesulfonamide 80-17-1, Benzenesulfonyl hydrazide 98-09-9, Benzenesulfonyl chloride 98-59-9, p-Toluenesulfonyl chloride 98-68-0, p-Methoxybenzenesulfonyl chloride 98-74-8, p-Nitrobenzenesulfonyl chloride 107-15-3, Ethylenediamine, reactions 107-21-1, Ethylene glycol, reactions 110-63-4, 1,4-Butanediol, reactions 111-29-5, 1,5-Pentanediol 111-46-6, Diethylene glycol, reactions 124-63-0, Methanesulfonyl chloride 421-83-0, Trifluoromethanesulfonyl chloride 504-63-2, 1,3-Propanediol 505-10-2, 3-(Methylthio)propanol 556-48-9,

1,4-Cyclohexanediol 594-44-5, Ethanesulfonyl chloride 625-69-4, 2,4-Pentanediol 629-11-8, 1,6-Hexanediol 699-12-7, 2-(Phenylthio)ethanol 777-44-6, m-(Trifluoromethyl)benzenesulfonyl chloride 1950-68-1, 4-Methoxybenzenesulfonyl hydrazide 2508-29-4, 5-Aminopentanol 2580-77-0, 2,2'-Sulfonyldiethanol 3144-09-0, Methanesulfonamide 3446-90-0, 4-(Methylthio)benzyl alcohol 4048-33-3, 6-Aminohexanol 5271-38-5, 2-(Methylthio)ethanol 5455-59-4, o-Nitrobenzenesulfonamide 5470-49-5, 4-(Methanesulfonyl)aniline 10210-17-0, 3-(4-Hydroxyphenyl)propanol 13325-10-5, 4-Aminobutanol 15205-66-0, 2-Hydroxyethyl methyl sulfone 20582-85-8 35303-76-5, 4-(2-Aminoethyl)benzenesulfonamide 41687-30-3, 2-Hydroxyethyl m-nitrophenyl sulfone 78521-69-4, N-(4-Hydroxybutyl)toluenesulfonamide 78894-78-7, 2-Aminoethanol tosylate 385369-59-5, 2-Aminoethanol mesylate 385369-67-5, [(Methanesulfonyl)methyl]amine
RL: RCT (Reactant); RACT (Reactant or reagent)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT 16780-44-2P, 5-(Tosylamino)pentanol 87426-50-4P, Naproxen 2-hydroxyethyl ester 106996-61-6P 120339-20-0P, Diclofenac 3-hydroxypropyl ester 126962-41-2P, Ibuprofen 3-hydroxypropyl ester 156967-30-5P, Naproxen 3-hydroxypropyl ester 156967-31-6P, Naproxen 6-hydroxyhexyl ester 184474-04-2P, Naproxen 4-hydroxybutyl ester 214708-31-3P, Ketoprofen 3-hydroxypropyl ester 354145-60-1P, Indomethacin 3-hydroxypropyl ester 385369-36-8P 385369-62-0P 385369-83-5P, 6-(Tosylamino)hexanol 385369-91-5P, N-(4-Hydroxybutyl)methanesulfonamide 385369-92-6P, 3-(4-Hydroxyphenyl)propanol ditosylate 385424-07-7P 385800-13-5P, Naproxen 5-hydroxypentyl ester 385800-14-6P, Flurbiprofen 3-hydroxypropyl ester 385800-15-7P, Carprofen 3-hydroxypropyl ester 385800-17-9P, Naproxen 2-(methylthio)ethyl ester 385800-18-0P, Naproxen 3-(methylthio)propyl ester 385800-19-1P, Naproxen 4-(methylthio)butyl ester 385800-20-4P, Naproxen 2-(phenylthio)ethyl ester 385800-24-8P, Naproxen 4-(methylthio)benzyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT 385369-40-4P 385369-44-8P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT 53-86-1, Indomethacin 1120-71-4, Propanesultone 1633-83-6, Butanesultone 5104-49-4, Flurbiprofen 15307-79-6, Diclofenac sodium 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 22071-15-4, Ketoprofen 26159-34-2, Naproxen sodium 53716-49-7, Carprofen
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

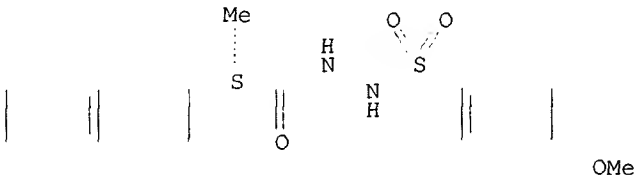
IT 50-78-2DP, Aspirin, modified prodrug 54-21-7DP, Sodium salicylate, modified prodrug 61-68-7DP, Mefenamic acid, modified prodrug 103-90-2DP, Acetaminophen, modified prodrug 552-94-3DP, Salsalate, modified prodrug 2016-36-6DP, Choline salicylate, modified prodrug, preparation 6385-02-0DP, Meclofenamate sodium, modified prodrug 18917-89-0DP, Magnesium salicylate, modified prodrug 21256-18-8DP, Oxaprozin, modified prodrug 22494-42-4DP, Diflunisal, modified prodrug 23187-87-3DP, Choline magnesium salicylate, modified prodrug 26171-23-3DP, Tolmetin, modified prodrug 31842-01-0DP, Indoprofen, modified prodrug 33005-95-7DP, Tiaprofenic acid, modified prodrug 34597-40-5DP, modified prodrug 36322-90-4DP, Piroxicam, modified prodrug 38194-50-2DP, Sulindac, modified prodrug 41340-25-4DP, Etodolac, modified prodrug 42924-53-8DP, Nabumetone, modified prodrug

51803-78-2DP, Nimesulide, modified prodrug 70374-39-9DP, Lornoxicam, modified prodrug 71125-38-7DP, Meloxicam, modified prodrug 74103-07-4DP, Ketorolac tromethamine, modified prodrug 80937-31-1DP, Flosulide, modified prodrug 354145-61-2P 385369-37-9P 385369-42-6P 385369-45-9P 385369-47-1P 385369-48-2P 385369-49-3P 385369-50-6P 385369-51-7P 385369-52-8P 385369-53-9P 385369-54-0P 385369-55-1P 385369-56-2P 385369-57-3P 385369-58-4P 385369-60-8P 385369-61-9P 385369-63-1P 385369-64-2P 385369-65-3P 385369-66-4P 385369-68-6P 385369-69-7P 385369-70-0P **385369-71-1P** 385369-72-2P 385369-73-3P 385369-74-4P 385369-75-5P 385369-76-6P 385369-77-7P 385369-78-8P 385369-79-9P 385369-80-2P 385369-81-3P 385369-82-4P 385369-84-6P 385369-86-8P 385369-88-0P 385369-90-4P 385369-93-7P 385424-08-8P 385800-16-8P, Naproxen 2-(methanesulfonyl)ethyl ester 385800-21-5P, Naproxen 3-(methanesulfonyl)propyl ester 385800-22-6P, Naproxen 4-(methanesulfonyl)butyl ester 385800-23-7P, Naproxen 2-(benzenesulfonyl)ethyl ester 385800-25-9P, Naproxen 4-(methanesulfonyl)benzyl ester 385800-26-0P, Diclofenac 2-(methanesulfonyl)ethyl ester 385800-27-1P, Diclofenac 4-[(methanesulfonyl)amino]butyl ester 385800-28-2P, Diclofenac 4-[(toluenesulfonyl)amino]butyl ester
RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

IT **385369-71-1P**
RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(modification of pharmacol. active agents for use as nonsteroidal anti-inflammatory drugs)

RN 385369-71-1 HCAPLUS
CN 2-Naphthaleneacetic acid, 6-methoxy-.alpha.-methyl-, 2-[(4-methoxyphenyl)sulfonyl]hydrazide, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L48 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:780840 HCAPLUS
DN 135:331197
TI Synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors
IN Craig, Richard A.; Kawai, Megumi; Lynch, Linda M.; Patel, Jyoti R.; Sheppard, George S.; Wang, Jieyi; Yang, Fan; Ba-Maung, Nwe Y.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 173 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM C07C243-28
ICS C07C239-20; C07C321-14; C07D215-46; C07D213-75; C07D237-20; A61K031-165; A61K031-175; A61K031-18; A61K031-435; A61K031-50
CC 23-18 (Aliphatic Compounds)
Section cross-reference(s): **25**, 34
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2001079157	A1	20011025	WO 2001-US12274	20010413
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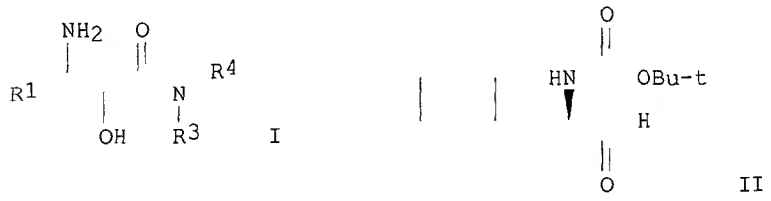

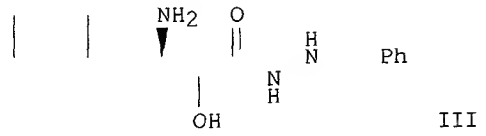

AB Title compds. I [R1 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, (heterocycle)alkyl, R5S-alkylene; R3 = H, alkyl, arylalkyl; R4 = NR6R7, OR8; R5 = alkyl, aryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl; R6-7 = H, alkanoyl, alkenyl, alkenyloxyalkyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylthioalkyl, aryl, arylalkanoyl, etc.; or R6-7 together are arylalkylidene; or R6-7 together with the nitrogen atom to which they are attached, form a heterocycle; R8 = H, alkanoylalkyl, alkenyl, alkoxycarbonylalkyl, alkyl, amidoalkyl, aryl, arylalkyl, etc.; R9-10 = H, alkyl, aryl] were prepd. Over 450 synthetic examples were reported. For instance, (2R)-2-(Boc)amino-3-cyclohexylpropanoic acid was reduced to the corresponding alc. (PhMe, Red-Al, 0.degree.C, room temp. 1 h) and oxidized to II (DMSO, Py.bul.SO3, Et3N, room temp. 30 min). II was converted to the bisulfite addn. product (H2O, NaHSO3, 5.degree.C, 24 h) and reacted with KCN to give the .alpha.-hydroxy nitrile intermediate which was hydrolyzed to the carboxylic acid (12 N HCl, reflux, 21 h) and converted to III by condensation with benzylhydrazine (DCM/DMA, DIC, NMM, HOBt). Selected compds. I had IC50 < 0.1 .mu.M for MetAP2. I are useful for inhibiting angiogenesis.

ST hydrazide alkoxyamide angiogenesis inhibitors metap2 prepn

IT Angiogenesis inhibitors

(synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 369355-67-9P 369355-68-0P 369355-69-1P 369355-70-4P 369355-71-5P
369355-72-6P 369355-73-7P 369355-74-8P **369355-75-9P**
369355-76-0P 369355-77-1P 369355-78-2P 369355-79-3P 369355-80-6P
369355-81-7P 369355-82-8P 369355-83-9P 369355-84-0P 369355-85-1P
369355-86-2P 369355-87-3P 369355-88-4P 369355-89-5P 369355-90-8P
369355-91-9P 369355-92-0P 369355-93-1P 369355-94-2P 369355-95-3P
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369356-31-0P 369356-32-1P 369356-33-2P 369356-34-3P 369356-35-4P
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369358-13-4P 369358-14-5P 369358-15-6P 369358-16-7P 369358-17-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 369358-18-9P 369358-19-0P 369358-20-3P 369358-21-4P 369358-22-5P
369358-23-6P 369358-24-7P 369358-25-8P 369358-26-9P 369358-27-0P
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369360-41-8P 369360-42-9P 369360-43-0P 369360-44-1P 369360-45-2P
369360-46-3P 369360-47-4P 369360-48-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 585-71-7P 18328-11-5P, Benzenebutanal 39684-80-5P, N-(tert-Butoxycarbonyl)-2-bromoethylamine 52245-11-1P 58634-67-6P 67032-33-1P, Methyl 3-(2,3-dihydroxypropyloxy)benzoate 68432-92-8P, Methyl 3-(cyanomethyl)benzoate 71925-14-9P 79250-46-7P, Methyl 3-(prop-2-enyloxy)benzoate 110238-61-4P 129593-17-5P 148433-10-7P, Methyl 3-propoxybenzoate 160820-17-7P 172789-09-2P 339592-56-2P 360788-02-9P, 3-(3-Indolyl)propanal 369360-49-6P 369360-50-9P
369360-51-0P 369360-52-1P 369360-53-2P 369360-54-3P 369360-55-4P
369360-56-5P 369360-57-6P 369360-58-7P 369360-59-8P 369360-60-1P
369360-61-2P 369360-62-3P 369360-63-4P 369360-64-5P 369360-65-6P
369360-66-7P 369360-67-8P 369360-68-9P 369360-69-0P 369360-70-3P
369360-71-4P 369360-72-5P, Ethyl 4-ethyloct-2-enoate 369360-73-6P
369360-74-7P 369360-75-8P 369360-76-9P 369360-77-0P 369360-78-1P
369360-79-2P 369360-80-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 50-45-3, 2,3-Dichlorobenzoic acid 50-79-3, 2,5-Dichlorobenzoic acid 50-84-0, 2,4-Dichlorobenzoic acid 51-36-5, 3,5-Dichlorobenzoic acid 51-44-5, 3,4-Dichlorobenzoic acid 51-71-8, 1-(2-Phenethyl)hydrazine 55-22-1, 4-Pyridinecarboxylic acid, reactions 64-04-0,

2-Phenylethylamine 69-72-7, 2-Hydroxybenzoic acid, reactions 74-11-3, 4-Chlorobenzoic acid 75-26-3, 2-Bromopropane 78-77-3, 1-Bromo-2-methylpropane 79-31-2, 2-Methylpropionic acid 86-55-5, 1-Naphthoic acid 86-87-3, 1-Naphthylacetic acid 88-13-1, 3-Thiophenecarboxylic acid 88-14-2, Furan-2-carboxylic acid 88-65-3, 2-Bromobenzoic acid 91-40-7, N-Phenylanthranilic acid 91-52-1, 2,4-Dimethoxybenzoic acid 93-07-2, 3,4-Dimethoxybenzoic acid 93-25-4, 2-Methoxyphenylacetic acid 94-53-1, 1,3-Benzodioxole-5-carboxylic acid 98-73-7, 4-tert-Butylbenzoic acid 98-85-1 98-89-5, Cyclohexanecarboxylic acid 98-97-5, 2-Pyrazine carboxylic acid 98-98-6, 2-Pyridinecarboxylic acid 99-04-7, 3-Methylbenzoic acid 99-05-8, 3-Aminobenzoic acid 99-06-9, 3-Hydroxybenzoic acid, reactions 99-64-9, 3-Dimethylaminobenzoic acid 99-94-5, 4-Methylbenzoic acid 99-96-7, 4-Hydroxybenzoic acid, reactions 100-09-4, 4-Methoxybenzoic acid 100-63-0, 1-Phenylhydrazine 103-82-2, Phenylacetic acid, reactions 104-01-8, 4-Methoxyphenylacetic acid 104-88-1, 4-Chlorobenzaldehyde, reactions 106-94-5, 1-Bromopropane 111-14-8, Heptanoic acid 118-41-2, 3,4,5-Trimethoxybenzoic acid, reactions 118-90-1, 2-Methylbenzoic acid 118-91-2, o-Chlorobenzoic acid 118-92-3, 2-Aminobenzoic acid 134-11-2, 2-Ethoxybenzoic acid 150-13-0, 4-Aminobenzoic acid 349-46-2, D-Cystine 368-78-5 368-90-1, 1-[4-(Trifluoromethyl)phenyl]hydrazine 371-14-2, 1-(4-Fluorophenyl)hydrazine 445-29-4, 2-Fluorobenzoic acid 454-92-2, 3-(Trifluoromethyl)benzoic acid 455-24-3, 4-(Trifluoromethyl)benzoic acid 455-38-9, 3-Fluorobenzoic acid 456-22-4, 4-Fluorobenzoic acid 488-93-7, Furan-3-carboxylic acid 499-06-9, 3,5-Dimethylbenzoic acid 501-81-5, 3-Pyridylacetic acid 503-74-2, 3-Methylbutyric acid 524-38-9, N-Hydroxyphthalamide 527-72-0, 2-Thiophenecarboxylic acid 530-50-7 536-40-3, 4-Chlorobenzohydrazide 536-66-3, 4-Isopropylbenzoic acid 537-47-3, N-Phenylhydrazinecarboxamide 539-44-6, 1-(4-Methylphenyl)hydrazine 556-08-1, 4-Acetamidobenzoic acid 579-75-9, o-Anisic acid 581-96-4, 2-Naphthylacetic acid 585-76-2, 3-Bromobenzoic acid 586-38-9, 3-Methoxybenzoic acid 586-76-5, 4-Bromobenzoic acid 589-21-9, 1-(4-Bromophenyl)hydrazine 593-56-6, O-Methylhydroxylamine hydrochloride 603-79-2, 2,3-Dimethylbenzoic acid 610-72-0, 2,5-Dimethylbenzoic acid 611-01-8, 2,4-Dimethylbenzoic acid 612-35-1, .alpha.-Phenyl-o-toluic acid 613-94-5, Benzohydrazide 615-21-4 618-40-6, 1-Methyl-1-phenylhydrazine 619-04-5, 3,4-Dimethylbenzoic acid 619-64-7, 4-Ethylbenzoic acid 619-65-8, 4-Cyanobenzoic acid 619-84-1, 4-Dimethylaminobenzoic acid 619-86-3, 4-Ethoxybenzoic acid 622-36-6, 1-(2-Methylphenyl)hydrazine 634-97-9, 2-Pyrrole carboxylic acid 636-10-2, 1-(3-Methylbutyl)-1-phenylhydrazine 636-44-2, 2,5-Dimethyl-3-furoic acid 636-97-5, 4-Nitrobenzohydrazide 637-80-9, Ethyl hydrazinoacetate 644-21-3, 1-Ethyl-1-phenylhydrazine 658-27-5, 1-(3-Fluorophenyl)hydrazine 699-90-1, 3-Fluoro-2-methylbenzoic acid 771-61-9, Pentafluorophenol 825-99-0, 3-(Methylthio)benzoic acid 830-96-6, 1H-Indole-3-propanoic acid 867-13-0, Triethyl phosphonoacetate 870-46-2, tert-Butyl hydrazinecarboxylate 1014-81-9, 3-(Trifluoromethoxy)benzoic acid 1073-69-4, 1-(4-Chlorophenyl)hydrazine 1115-59-9, L-Alanine ethyl ester hydrochloride 1123-00-8, Cyclopentylacetic acid 1129-28-8, Methyl 3-(bromomethyl)benzoate 1132-21-4, 3,5-Dimethoxybenzoic acid 1438-16-0, 3-Amino-2-thioxo-1,3-thiazolidin-4-one 1452-63-7 1498-96-0, 4-Butoxybenzoic acid 1521-38-6, 2,3-Dimethoxybenzoic acid 1538-08-5 1576-35-8, 4-Methylphenylsulfonylhydrazine 1621-91-6, 1H-Pyrazole-5-carboxylic acid 1673-47-8, 3-Chlorobenzohydrazide 1798-09-0, 3-Methoxyphenylacetic acid 1821-12-1, 4-Phenylbutyric acid 1877-72-1, 3-Cyanobenzoic acid 1878-65-5, 3-Chlorophenylacetic acid 1878-66-6, 4-Chlorophenylacetic acid 1918-79-2, 5-Methylthiophene-2-carboxylic acid 2164-61-6, 3-Pyridazine carboxylic acid 2213-43-6, 1-Aminopiperidine 2215-77-2, 4-Phenoxybenzoic acid 2243-55-2, 1-Naphthylhydrazine 2361-27-5, 2-Thiophenecarbohydrazide 2368-80-1, 1-(2-Fluorophenyl)hydrazine 2438-05-3, 4-n-Propylbenzoic acid 2444-36-2, 2-Chlorophenylacetic acid

2550-36-9, (Bromomethyl)cyclohexane 2576-47-8, 2-Bromoethylamine hydrobromide 2687-43-6, O-Benzylhydroxylamine hydrochloride 2785-98-0, 2,5-Dimethoxybenzoic acid 3235-69-6, 4-Morpholineacetic acid 3332-29-4, O-Ethylhydroxylamine hydrochloride 3400-45-1, Cyclopentanecarboxylic acid 3438-16-2, 5-Chloro-2-methoxybenzoic acid 3471-32-7, 1-(4-Methoxyphenyl)hydrazine 3619-22-5, 4-Methylbenzohydrazide 3839-22-3, 2-Cyanobenzoic acid 3919-73-1, O-(Carboethoxy)methylhydroxylamine hydrochloride 3973-08-8, 4-Thiazole carboxylic acid 4052-30-6, 4-(Methylsulfonyl)benzoic acid 4361-28-8, 3-Cyclohexylpropanal 4392-54-5, 4-Hydrazinobenzenesulfonamide 4519-39-5, 2,3-Difluorobenzoic acid 4761-00-6, 2,4,6-Trimethylbenzyl bromide 4846-21-3, O-Phenylhydroxylamine 4890-85-1, 2-Bibenzylcarboxylic acid 4930-98-7, 2-Hydrazinopyridine 5042-30-8, 1-(2,2,2-Trifluoroethyl)hydrazine 5292-21-7, Cyclohexylacetic acid 5331-43-1, Benzyl carbazate 5341-58-2, 3-Hydroxy-2-naphthoylhydrazine 5409-31-4, 3,4-Diethoxybenzoic acid 5429-28-7, 4-(Diethylamino)benzoic acid 5438-19-7, 4-Propoxybenzoic acid 5537-74-6, 3-(Ethylthio)benzoic acid 5728-52-9, 4-Phenylphenylacetic acid 5785-06-8, 3-Methoxybenzohydrazide 5814-05-1, 2-Chlorobenzohydrazide 5818-06-4, 3-Hydroxybenzoyl hydrazide 6027-14-1, D-Homocysteine 6084-58-8, O-Isobutylhydroxylamine hydrochloride 6092-80-4, O-Phenylhydroxylamine hydrochloride 6498-34-6, 1-Cyclohexylhydrazine 6638-79-5, N,O-Dimethylhydroxylamine hydrochloride 6688-11-5, Cyclooctanealdehyde 6973-60-0, 1-Methylpyrrole-2-carboxylic acid 7466-54-8, 2-Methoxybenzohydrazide 10449-07-7, 1-(2-Chlorophenyl)hydrazine 13050-47-0, 3-Methylbenzohydrazide 13115-43-0, 2-Pyridylacetic acid 13116-27-3, 1-(4-Iodophenyl)hydrazine 13205-46-4, 4-Isopropoxybenzoic acid 13205-48-6, 4-Methylthiobenzoic acid 13205-49-7, 4-(Ethylthio)benzoic acid 13205-50-0, 4-(Isopropylthio)benzoic acid 13221-86-8, 2,4-Dihydroxybenzohydrazide 13636-54-9, 1-Mesitylhydrazine 13957-54-5 14190-59-1, 2-Thiazole carboxylic acid 14527-41-4, 5-Thiazolecarboxylic acid 14763-20-3, 1-(3-Chlorophenyl)hydrazine 15384-39-1, 1-(3-Methoxyphenyl)hydrazine 16182-15-3 16596-41-1, 1-Pyrrolidinamine 16874-33-2, 2-Tetrahydrofuroic acid 17078-28-3, 4-Dimethylaminophenylacetic acid 17284-97-8, 3-Chloro-6-hydrazinopyridazine 17894-25-6, 2,5-Dimethoxybenzohydrazide 19275-55-9 19438-10-9, Methyl 3-hydroxybenzoate 20570-96-1 21169-71-1, 5-Isoxazolecarboxylic acid 22026-39-7 22683-48-3, 4-(Propylthio)benzoic acid 22683-49-4, 4-(Butylthio)benzoic acid 22683-51-8, 4-(Hexylthio)benzoic acid 22855-95-4, 4-(Benzylthio)benzoic acid 23806-24-8, 3-Methylthiophene-2-carboxylic acid 23834-14-2, 7-Chloro-4-hydrazinoquinoline 25503-90-6, 1-Acetylpiperidine-4-carboxylic acid 28356-58-3, 4-Pyridylacetic acid 30923-92-3, 1-(Cyclopentyl)hydrazine 30963-12-3, 2-(1-Methylhydrazino)-3-nitropyridine 31462-59-6, 4-Pyrimidine carboxylic acid 31719-76-3, 4-(Phenoxymethyl)benzoic acid 32443-99-5, D-Cysteine hydrochloride 32910-52-4, 4-(Cyclohexylthio)benzoic acid 32910-56-8, 4-(4-Methylpentylthio)benzoic acid 32910-70-6, 4-(2-Cyclohexylethylthio)benzoic acid 36239-09-5, Ethyl-3-chloro-3-oxo propionate 36331-57-4, Benzylsulfonylhydrazine 37718-11-9, 1H-Pyrazole-4-carboxylic acid 37860-70-1, 2,3-Diethoxybenzoic acid 38945-21-0, O-Allylhydroxylamine hydrochloride 39115-96-3, 3-Bromobenzohydrazide 39627-84-4, 2-Naphthoylhydrazine 39684-28-1, O-tert-Butylhydroxylamine hydrochloride 39943-56-1, 1-(3,5-Dichlorophenyl)hydrazine 40594-30-7, 1-(2,4-Difluorophenyl)hydrazine 40887-80-7, 1-(3-Bromophenyl)hydrazine 43038-45-5, 1-Naphthoylhydrazine 46230-31-3, O-(Carbobenzyloxy)methylhydroxylamine 51304-65-5, 1-(3-Chloro-4-methylphenyl)hydrazine 51421-13-7, 1-(2-Chlorobenzyl)hydrazine 51546-12-4, 2-Chloro-5-(methylthio)benzoic acid 51707-38-1, 3,5-Dimethoxybenzohydrazide 53516-97-5, 3-Chlorophenylsulfonylhydrazine 53551-35-2, 4-(2-Methylpropylthio)benzoic acid 54699-92-2 58586-81-5, 4-Ethoxybenzohydrazide 58791-94-9, 1-(4-Chloro-2-methylphenyl)hydrazine 59983-39-0, (2S)-2-(Methoxymethyl)-

1-pyrrolidinamine 60739-40-4, 3-(Benzylthio)benzoic acid 61645-34-9, 2-Hydrazinoquinoxaline 61715-74-0, 1-Propyl-1-phenylhydrazine 62524-21-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 63693-65-2, 1-(4-Isopropylphenyl)hydrazine 65227-54-5, 1-Naphthylsulfonylhydrazine 66971-55-9, 5-Hydrazino-1,3-dimethyl-4-nitro-1H-pyrazole 67487-35-8, 2,5-Dichlorobenzohydrazide 70491-05-3, (2R)-2-[(tert-Butoxycarbonyl)amino]-2-(cyclohexyl)ethanoic acid 71056-18-3, 1-(Cyclopropylmethyl)-1-phenylhydrazine 72748-99-3, (2R)-2-(Methoxymethyl)-1-pyrrolidinamine 73469-90-6 75681-13-9, Methyl 3-hydrazino-2-thiophenecarboxylate 76953-33-8, 3-Chloro-6-(1-methylhydrazino)pyridazine 79786-62-2, 1-Octyl-1-phenylhydrazine 82732-07-8, (2R)-2-[(tert-Butoxycarbonyl)amino]-4-phenylbutanoic acid 83823-06-7, 6-Chloro(2H)-1-benzopyran-3-carboxylic acid 84282-78-0, 3-Chloro-4-fluorophenylhydrazine 88561-15-3, 1-Hexyl-1-phenylhydrazine 89364-31-8 96017-23-1, 4-Chloro-2-methyl-5-(1-methylhydrazino)-3(2H)-pyridazinone 97108-50-4, 1-(2,5-Difluorophenyl)hydrazine 104636-55-7, 1-(3-Phenylpropyl)-1-phenylhydrazine 106087-14-3, 1-(2-Methylpropyl)-1-phenylhydrazine 108329-74-4, (2R)-2-[(tert-Butoxycarbonyl)amino]-4-(ethylthio)butanoic acid 110208-00-9, 3-(Propylthio)benzoic acid 114670-74-5 114838-12-9, 3-(Isopropylthio)benzoic acid 127095-92-5, (2R)-2-[(tert-Butoxycarbonyl)amino]-3-cyclohexylpropanoic acid 140853-10-7 163620-24-4, 2-(1-Methylhydrazino)-5-(trifluoromethyl)pyridine 170162-56-8, 3-(Butylthio)benzoic acid 172516-47-1 175137-28-7, Methyl 2-hydrazino-4-(trifluoromethyl)-5-pyrimidinecarboxylate 175137-33-4 175276-74-1, 1-(2-Chloro-6-fluorophenyl)hydrazine 207974-22-9, N-(4-Chloro-2-methoxyphenyl)hydrazinecarboxamide 240407-62-9 369360-81-6 369360-82-7 369360-83-8 369360-84-9, 1-Pentyl-1-phenylhydrazine 369360-85-0, 1-(2-Methylbutyl)-1-phenylhydrazine 369360-86-1, 1-(2-Methylpentyl)-1-phenylhydrazine 369360-87-2, 1-(3-Methylpentyl)-1-phenylhydrazine 369360-88-3, 1-(3,3-Dimethylbutyl)-1-phenylhydrazine 369360-89-4, 1-(2-Ethylbutyl)-1-phenylhydrazine 369360-90-7, 1-Dodecyl-1-phenylhydrazine 369360-91-8, 1-(3,5,5-Trimethylhexyl)-1-phenylhydrazine 369360-92-9, 1-(2-Benzyloxyethyl)-1-phenylhydrazine 369360-93-0, 1-(2,2,5-Trichloropentyl)-1-phenylhydrazine 369360-94-1, 1-Heptyl-1-phenylhydrazine 369360-95-2, 1-[3-(Methylthio)propyl]-1-phenylhydrazine 369360-96-3, 1-(Cyclopentylmethyl)-1-phenylhydrazine 369360-97-4, 1-(5-Hydroxypentyl)-1-phenylhydrazine 369360-98-5, 1-((2R)-2,3-Dihydroxypropyl)-1-phenylhydrazine 369360-99-6, 1-(2,2-Dichlorohexyl)-1-phenylhydrazine 369361-00-2, 1-(7-Methoxy-3,7-dimethyloctyl)-1-phenylhydrazine 369361-01-3, 1-[2-(4-Methylphenyl)ethyl]-1-phenylhydrazine 369361-02-4, 1-(2-Ethylhexyl)-1-phenylhydrazine 369361-03-5, 1-[2-(4-Chlorophenyl)-2-cyanoethyl]-1-phenylhydrazine 369361-04-6, 1-(2-Phenylpropyl)-1-phenylhydrazine 369361-05-7, 1-(Cyclooctylmethyl)-1-phenylhydrazine 369361-06-8, 1-[(11Z)-1-Hexadecenyl]-1-phenylhydrazine 369361-07-9, 1-Tridecyl-1-phenylhydrazine 369361-08-0, 4-(1-Phenylhydrazino)butanoic acid 369361-09-1, 1-((6Z)-6-Nonenyl)-1-phenylhydrazine 369361-10-4, 1-((4Z)-4-Decenyl)-1-phenylhydrazine 369361-11-5, 1-(4-Pentenyl)-1-phenylhydrazine 369361-12-6, 1-(3,7-Dimethyl-6-octenyl)-1-phenylhydrazine 369361-13-7, 1-(4,4,4-Trifluorobutyl)-1-phenylhydrazine 369361-14-8, 1-(3-Hydroxybutyl)-1-phenylhydrazine 369361-15-9, 1-[2-[(3,7-Dimethyl-6-octenyl)oxy]ethyl]-1-phenylhydrazine 369361-16-0, 1-[2-(3,3-Dimethylcyclohexyl)ethyl]-1-phenylhydrazine 369361-17-1, 1-((4S)-6-Bromo-4-methylhexyl)-1-phenylhydrazine 369361-18-2, 1-Cyclohexylmethyl-1-phenylhydrazine 369361-19-3, 3-(Hexylthio)benzoic acid 369361-20-6, 3-(2-Methylpropylthio)benzoic acid 369361-21-7, 3-(4-Methylpentylthio)benzoic acid 369361-22-8, 3-(1-Methylpropylthio)benzoic acid 369361-23-9, 3-(2,2-Dimethylpropylthio)benzoic acid 369361-24-0, 3-(Cyclohexylthio)benzoic

acid 369361-25-1, 3-(2-Cyclohexylethylthio)benzoic acid 369361-26-2, 3-(2-Phenylethylthio)benzoic acid 369361-27-3, 3-(3-Phenylpropylthio)benzoic acid 369361-28-4 369361-29-5, 4-(1-Methylpropylthio)benzoic acid 369361-30-8, 4-(2,2-Dimethylpropylthio)benzoic acid 369361-31-9, 4-(2-Phenylethylthio)benzoic acid 369361-32-0, 4-(3-Phenylpropylthio)benzoic acid 369361-33-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

IT 61229-81-0, Methionine aminopeptidase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(type 2; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) American Cyanamid Co; WO 9942436 A 1999 HCAPLUS

(2) Merck Patent Gmbh; DE 19831710 A 2000 HCAPLUS

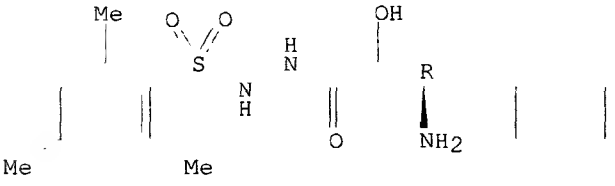
(3) Zask, A; US 5977408 A 1999 HCAPLUS

IT **369355-75-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis of hydrazide and .alpha.-alkoxyamide angiogenesis inhibitors)

RN 369355-75-9 HCAPLUS

CN Cyclohexanebutanoic acid, .beta.-amino-.alpha.-hydroxy-, 2-[(2,4,6-trimethylphenyl)sulfonyl]hydrazide, (.beta.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L48 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:730683 HCAPLUS

DN 135:288572

TI Preparation of diphenyl ether compounds as serotonin re-uptake inhibitors

IN Andrews, Mark David; Hepworth, David; Middleton, Donald Stuart; Stobie, Alan

PA Pfizer Limited, UK; Pfizer Inc.

SO PCT Int. Appl., 158 pp.
CODEN: PIXXD2

DT **Patent**

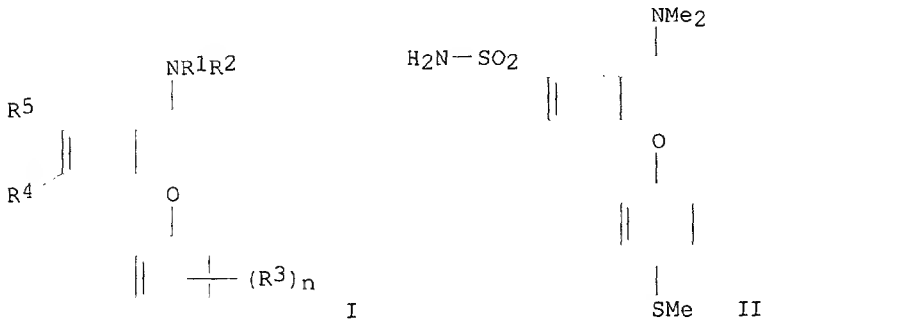
LA English

IC ICM C07C217-58
ICS C07C229-38; C07C237-28; C07C255-43; C07C255-59; C07C311-05; C07C311-08; C07C311-37; C07C317-32; C07C323-20; C07C323-32; C07C323-67; C07D207-12; C07D231-38; C07D233-61; C07D249-06; C07D249-08; C07D295-08; C07D295-18; A61K031-137

CC 25-9 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001072687	A1	20011004	WO 2001-IB428	20010319
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002052395	A1	20020502	US 2001-810378	20010316
	US 6448293	B2	20020910		
	EP 1268396	A1	20030102	EP 2001-917347	20010319
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	NO 2002004663	A	20020927	NO 2002-4663	20020927
PRAI	GB 2000-7884	A	20000331		
	US 2000-197127P	P	20000414		
	WO 2001-IB428	W	20010319		
OS	MARPAT 135:288572				
GI					



AB Title compds. I [wherein R1 and R2 = independently H or (cycloalkyl)alkyl; or R1 and R2 together with the N to which they are attached form an azetidine ring; R3 = independently CF3, OCF3, alkylthio, or alkoxy; n = 1-3; R4 and R5 = independently AX; A = CH:CH or (CH2)p; p = 0-2; X = H, halo, OH, alkoxy, NO2, CN, CHO, alkylthio, alkylsulfinyl, alkylsulfonyl, or (un)substituted carbamoyl, sulfamoyl, amino, carboxy, etc.; or pharmaceutically acceptable salts, solvates, or polymorphs thereof] were prepd. as monoamine re-uptake inhibitors, particularly as selective serotonin re-uptake inhibitors. For example, 4-(methylmercapto)phenol was coupled with 2-fluorobenzaldehyde using K2CO3 in DMF to give 2-[4-(methylsulfanyl)phenoxy]benzaldehyde (100%). The aldehyde was dissolved in THF, DCM, Me2NH.bul.HCl, and TEA, treated with NaBH(OAc)3, and converted to the salt with 1M HCl in Et2O to afford N,N-dimethyl-N-[2-[4-(methylsulfanyl)phenoxy]benzyl]amine.bul.HCl (84%). Coupling the salt with ClSO3H in CH2Cl2 at 0.degree. to 5.degree.C, followed by stepwise addn. of MeCN with POCl3 and ammonia, produced the desired sulfonamide (II) in 61% yield. The latter showed serotonin re-uptake inhibition (SRI) activity with IC50 .ltoreq. 50 nM and was > 100-fold as potent in the inhibition of serotonin re-uptake than in the the inhibition of dopamine and noradrenaline re-uptake. I are useful in

the treatment of disorders such as depression, attention deficit hyperactivity disorder, obsessive-compulsive disorder, post-traumatic stress disorder, substance abuse disorders, and sexual dysfunction, including premature ejaculation (no data).

ST diphenyl ether prepn serotonin reuptake inhibitor; ether diphenyl prepn antidepressant; attention deficit hyperactivity disorder treatment diphenyl ether prepn; obsessive compulsive disorder treatment diphenyl ether prepn; posttraumatic stress disorder treatment diphenyl ether prepn; substance abuse treatment diphenyl ether prepn; sexual dysfunction treatment diphenyl ether prepn

IT Drugs of abuse
(abuse of, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Mental disorder
(attention deficit hyperactivity disorder, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Sexual behavior
(disorder, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Stress, animal
(emotional, treatment of post-traumatic; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Transport proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(monoamine-transporting, modulator; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Mental disorder
(obsession-compulsion, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Sexual behavior
(premature ejaculation, treatment; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT Antidepressants
(prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT 19555-09-0P, 3-Methoxy-4-(methylsulfanyl)phenol 60789-49-3P, 1-(Methylsulfanyl)-4-nitro-2-(trifluoromethyl)benzene 63094-56-4P, 4-(Methylsulfanyl)-3-(trifluoromethyl)aniline 78940-67-7P 95920-60-8P, 5-(Allyloxy)-1,3-benzoxathiol-2-one 127087-14-3P, 4-Methoxy-3-(methylsulfanyl)phenol 170282-24-3P, 5-(Benzyloxy)-2-sulfanylphenol 170283-11-1P, 6-(Benzyloxy)-1,3-benzoxathiol-2-one 217186-17-9P
289717-37-9P 361212-81-9P 364323-56-8P 364323-57-9P 364323-58-0P
364323-59-1P 364323-60-4P 364323-61-5P 364323-62-6P 364323-63-7P
364323-64-8P 364323-65-9P 364323-66-0P 364323-67-1P 364323-68-2P
364323-69-3P 364323-71-7P 364323-72-8P 364323-73-9P 364323-74-0P
364323-75-1P 364323-76-2P 364323-77-3P 364323-78-4P 364323-79-5P
364323-80-8P 364323-81-9P 364323-82-0P 364323-83-1P 364323-84-2P
364323-85-3P 364323-86-4P 364323-87-5P 364323-88-6P 364323-89-7P
364323-90-0P 364323-91-1P 364323-92-2P 364323-93-3P 364323-95-5P
364323-96-6P 364323-97-7P 364323-98-8P 364323-99-9P 364324-00-5P
364324-01-6P 364324-02-7P 364324-03-8P 364324-04-9P 364324-05-0P
364324-06-1P 364324-07-2P 364324-08-3P 364324-09-4P 364324-10-7P
364324-11-8P 364324-12-9P 364324-13-0P 364324-14-1P 364324-15-2P
364324-16-3P 364324-17-4P 364324-18-5P 364324-19-6P 364324-20-9P
364324-22-1P 364324-23-2P 364324-24-3P 364324-25-4P 364324-26-5P
364324-27-6P 364324-28-7P 364324-29-8P **364324-30-1P**
364324-31-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT 364321-43-7P 364321-47-1P 364321-48-2P 364321-49-3P 364321-52-8P
364321-53-9P 364321-54-0P 364321-56-2P 364321-57-3P 364321-58-4P

364321-59-5P 364321-61-9P 364321-62-0P 364321-64-2P 364321-65-3P
364321-66-4P 364321-67-5P 364321-68-6P 364321-70-0P 364322-18-9P
364322-19-0P 364322-20-3P 364322-21-4P 364322-28-1P 364322-29-2P
364322-33-8P 364322-34-9P 364322-35-0P 364322-36-1P 364322-37-2P
364322-39-4P 364322-42-9P 364322-43-0P 364322-59-8P 364322-60-1P
364322-61-2P 364322-62-3P 364322-64-5P 364322-65-6P 364322-66-7P
364322-67-8P 364322-77-0P 364322-79-2P 364322-80-5P 364322-81-6P
364322-95-2P 364322-96-3P 364322-97-4P 364322-98-5P 364323-06-8P
364323-07-9P 364323-08-0P 364323-13-7P 364323-24-0P 364323-31-9P
364323-32-0P 364323-36-4P 364323-37-5P 364323-42-2P 364323-46-6P
364323-48-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT 364321-41-5P 364321-42-6P 364321-44-8P 364321-45-9P 364321-46-0P
364321-50-6P 364321-51-7P 364321-55-1P 364321-71-1P 364321-72-2P
364321-73-3P 364321-74-4P 364321-76-6P 364321-78-8P 364321-80-2P
364321-81-3P 364321-83-5P 364321-85-7P 364321-87-9P 364321-89-1P
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364322-00-9P 364322-01-0P 364322-02-1P 364322-03-2P 364322-04-3P
364322-06-5P 364322-07-6P 364322-08-7P 364322-09-8P 364322-10-1P
364322-11-2P 364322-12-3P 364322-13-4P 364322-14-5P 364322-15-6P
364322-16-7P 364322-17-8P 364322-22-5P 364322-23-6P 364322-24-7P
364322-25-8P 364322-26-9P 364322-27-0P 364322-30-5P 364322-31-6P
364322-32-7P 364322-38-3P 364322-41-8P 364322-44-1P 364322-45-2P
364322-46-3P 364322-47-4P 364322-48-5P 364322-49-6P 364322-50-9P
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364322-85-0P 364322-86-1P 364322-87-2P 364322-88-3P 364322-89-4P
364322-90-7P 364322-91-8P 364322-92-9P 364322-93-0P 364322-94-1P
364322-99-6P 364323-00-2P 364323-01-3P 364323-02-4P 364323-04-6P
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364323-39-7P 364323-40-0P 364323-41-1P 364323-43-3P 364323-45-5P
364323-47-7P 364323-49-9P 364323-50-2P 364323-51-3P 364323-52-4P
364323-53-5P 364323-54-6P 364323-55-7P 364324-32-3P 364324-33-4P
364324-34-5P 364324-36-7P 364324-37-8P 364324-38-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT 50-67-9, Serotonin, biological studies 51-41-2, Noradrenaline 51-61-6, Dopamine, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

IT 79-06-1, Acrylamide, reactions 98-17-9, 3-(Trifluoromethyl)phenol 105-56-6 106-41-2, 4-Bromophenol 106-95-6, Allyl bromide, reactions 109-85-3, 2-Methoxyethylamine 110-91-8, Morpholine, reactions 288-32-4, Imidazole, reactions 288-36-8, 1H-1,2,3-Triazole 400-74-8, 2-Fluoro-5-nitrobenzotrifluoride 402-45-9, 4-(Trifluoromethyl)phenol 446-52-6, 2-Fluorobenzaldehyde 598-41-4, Glycinamide 771-61-9, Pentafluorophenol 827-99-6, 3-(Trifluoromethoxy)phenol 828-27-3, 4-(Trifluoromethoxy)phenol 1073-72-9, 4-(Methylmercapto)phenol 1820-80-0, 3-Amino-1H-pyrazole 2386-58-5, Vinylsulfonamide 2516-47-4,

Cyclopropylmethanamine 2646-90-4, 2,5-Difluorobenzaldehyde 2749-11-3, (S)-2-Amino-1-propanol 2799-21-5 4991-65-5, 6-Hydroxy-1,3-benzoxathiol-2-one 6361-21-3, 2-Chloro-5-nitrobenzaldehyde 7735-56-0, 5-Hydroxy-1,3-benzoxathiol-2-one 10147-37-2, 2-Propylsulfonyl chloride 16114-05-9 16588-02-6, 2-Chloro-5-nitrobenzonitrile 35320-23-1 36520-39-5, Azetidine hydrochloride 51517-01-2, 2-Methoxyethylsulfonyl chloride 57848-46-1, 4-Bromo-2-fluorobenzaldehyde 71924-62-4, 2-Fluoro-4,5-dimethoxybenzaldehyde 93777-26-5, 5-Bromo-2-fluorobenzaldehyde 105728-90-3, 2-Fluoro-5-methoxybenzaldehyde 112887-25-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

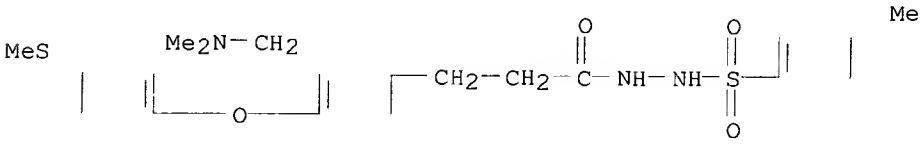
RE

(1) Akzo; EP 0516234 A 1992 HCAPLUS
(2) Buckley, A; US 5334748 A 1994 HCAPLUS
(3) Kametani, T; JOURNAL OF THE CHEMICAL SOCIETY, SECTION C: ORGANIC CHEMISTRY 1968, 23, P2877 HCAPLUS
(4) Manske, R; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1950, V72(10), P4797
(5) Pfizer; EP 0415613 A 1991 HCAPLUS
(6) Pfizer Products; WO 0050380 A 2000 HCAPLUS
(7) Yeager, G; SYNTHESIS 1995, 1, P28 HCAPLUS

IT **364324-30-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of di-Ph ether compds. as serotonin re-uptake inhibitors)

RN 364324-30-1 HCAPLUS

CN Benzenepropanoic acid, 3-[(dimethylamino)methyl]-4-[4-(methylthio)phenoxy]-, 2-[(4-methylphenyl)sulfonyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:364837 HCAPLUS

DN 133:135059

TI Synthesis of new substituted sulfonylhydrazinecarboxamides and sulfonylhydrazinecarbothioamides having antifungal and antibacterial activities

AU Nalavde, Yogesh Madhukar; Joshi, Vidya

CS C C Shroff Research Institute, Mumbai, 400 062, India

SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2000), 39B(1), 76-79
CODEN: IJSBDB; ISSN: 0376-4699

PB National Institute of Science Communication, CSIR

DT Journal

LA English

CC 25-13 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): 1, 10

AB P-Toluenesulfonylhydrazide on condensation with substituted Ph isocyanates and substituted Ph isothiocyanates gives N,2-disubstituted sulfonylhydrazinecarboxamides and N,2-disubstituted sulfonylhydrazinecarbothioamides, resp. Both sets of products were

bactericidal against S.aureus and S.typhi; one compd. shows fungicidal activity against T.mentagrophytes and T.rubrum.

ST sulfonylhydrazinecarboxamide prepn bactericidal fungicidal activity; sulfonylhydrazinecarbothioamide prepn bactericidal fungicidal activity; bactericidal fungicidal activity sulfonylhydrazinecarboxamide sulfonylhydrazinecarbothioamide

IT Antibacterial agents
Fungicides
(prepn. and bactericidal and fungicidal activity of sulfonylhydrazinecarboxamides and sulfonylhydrazinecarbothioamides)

IT **66884-31-9P 66884-32-0P 92432-45-6P**
131574-10-2P 158532-38-8P 158532-39-9P
203718-69-8P 203718-74-5P 281211-73-2P
284488-49-9P 286378-09-4P 286378-10-7P
286378-11-8P 286378-12-9P 286378-13-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and bactericidal and fungicidal activity of sulfonylhydrazinecarboxamides and sulfonylhydrazinecarbothioamides)

IT 95-51-2, 2-Chloroaniline 98-16-8, 3-Trifluoromethylaniline 106-47-8, 4-Chloroaniline, reactions 108-42-9, 3-Chloroaniline 108-91-8, Cyclohexylamine, reactions 348-54-9, 2-Fluoroaniline 371-40-4, 4-Fluoroaniline 372-19-0, 3-Fluoroaniline 608-27-5, 2,3-Dichloroaniline 1576-35-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and bactericidal and fungicidal activity of sulfonylhydrazinecarboxamides and sulfonylhydrazinecarbothioamides)

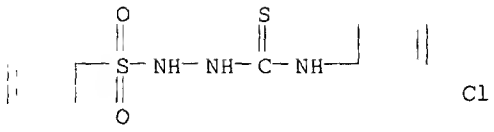
IT 104-12-1P, 4-Chlorophenyl isocyanate 329-01-1P, 3-Trifluoromethylphenyl isocyanate 404-71-7P, 3-Fluorophenyl isocyanate 1195-45-5P, 4-Fluorophenyl isocyanate 2131-55-7P, 4-Chlorophenyl isothiocyanate 2909-38-8P, 3-Chlorophenyl isocyanate 3173-53-3P, Cyclohexyl isocyanate 3320-83-0P, 2-Chlorophenyl isocyanate 16744-98-2P, 2-Fluorophenyl isocyanate 41195-90-8P, 2,3-Dichlorophenyl isocyanate **97319-65-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and bactericidal and fungicidal activity of sulfonylhydrazinecarboxamides and sulfonylhydrazinecarbothioamides)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Damle, S; Chem Eng News 1993, V71, P4 HCAPLUS
(2) Friedman, L; Org Syntheses, Coll 1973, V5, P1055
(3) Furniss, B; Vogels Textbook of Practical Organic Chemistry 1978, P737
(4) Hasan, R; Pesticide Science 1994, V42, P293
(5) Kurihara, T; Tohoku Yakka Daigaku Kenkyu Nempo 1969, V53 HCAPLUS
(6) Lozanova, K; Dokl Bulg Akad Nauk 1991, V44, P115 HCAPLUS
(7) Rodger, S; GB 2276382 1994 HCAPLUS
(8) Schraufstatter, E; Acta Pathologica et Microbiologica, Scandinaviea, Supplementum 1955, V104, P49
(9) Tomayo, M; Bull Soc Chim Fr 1964, V2, P248
(10) United States Rubber Co; Neth Appl 6, 515, 582 1966
(11) Wright, J; J Med Pharm Chem 1962, V5, P815 HCAPLUS

IT **66884-31-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and bactericidal and fungicidal activity of sulfonylhydrazinecarboxamides and sulfonylhydrazinecarbothioamides)

RN 66884-31-9 HCAPLUS

CN Benzenesulfonic acid, 4-methyl-, 2-[[(3-chlorophenyl)amino]thioxomethyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:808174 HCAPLUS
DN 132:165990
TI Protocols for amide high-speed analoging. Preparation of novel, small molecule cathepsin D inhibitors
AU Chen, Jinshan; Dixon, Brian R.; Dumas, Jacques; Brittelli, David
CS Bayer Research Center, Department of Chemistry Research, Pharmaceutical Division, Bayer Corporation, West Haven, CT, 06516, USA
SO Tetrahedron Letters (1999), 40(52), 9195-9199
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
CC 25-19 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): 1, 7
OS CASREACT 132:165990
AB Procedures for soln.-phase parallel synthesis of new, small mol. cathepsin D inhibitors by the coupling of acyl chlorides, sulfonyl chlorides and carboxylic acids with N nucleophiles were established using polymer-bound reagents to facilitate the chem. and/or to efficiently scavenge the unreacted starting materials and reaction byproducts. Ag(I) benzoate was used to facilitate the coupling of acyl chlorides with less reactive anilines. 2,3,5-(HO)Cl2C6H2CO(NH)2COCH2OC6H4-4-SCF3 was identified as a sub-micromolar cathepsin D inhibitor (IC50 = 320 nM).
ST amide cathepsin D inhibitor combinatorial synthesis; library amide cathepsin inhibitor prepn; solid phase synthesis amide library
IT Acid halides
RL: RCT (Reactant); RACT (Reactant or reagent)
(acid chlorides; solid-phase synthesis of amide library)
IT Sulfonyl halides
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorides; solid-phase synthesis of amide library)
IT Combinatorial library
(solid-phase synthesis of amide library)
IT Amines, reactions
Carboxylic acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(solid-phase synthesis of amide library)
IT Hydrazides
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase synthesis of amide library)
IT Amides, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of amide library)
IT 9025-26-7, Cathepsin D
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cathepsin D inhibitory activity of hydrazide)
IT 258520-64-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological

study); PREP (Preparation)
(solid-phase synthesis and cathepsin D inhibitory activity)

IT 107276-61-9P 258520-18-2P 258520-19-3P 258520-20-6P
258520-21-7P 258520-22-8P 258520-23-9P 258520-24-0P
258520-25-1P 258520-26-2P 258520-27-3P 258520-28-4P
258520-29-5P 258520-30-8P 258520-31-9P 258520-32-0P
258520-33-1P 258520-34-2P 258520-35-3P 258520-36-4P 258520-37-5P
258520-38-6P 258520-39-7P 258520-40-0P 258520-41-1P 258520-42-2P
258520-43-3P 258520-44-4P 258520-45-5P 258520-46-6P 258520-47-7P
258520-48-8P 258520-49-9P 258520-50-2P 258520-51-3P 258520-52-4P
258520-53-5P 258520-54-6P 258520-56-8P 258520-57-9P 258520-58-0P
258520-59-1P 258520-60-4P 258520-61-5P 258520-62-6P 258520-63-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of amide library)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Booth, R; J Am Chem Soc 1997, V119, P4882 HCAPLUS
(2) Desai, M; Tetrahedron Lett 1993, V34, P7685 HCAPLUS
(3) Dumas, J; Bioorg Med Chem Lett 1999, V9, P2531 HCAPLUS
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(5) Flynn, D; J Am Chem Soc 1997, V119, P4874 HCAPLUS
(6) Gayo, L; Tetrahedron Lett 1996, V38, P513
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(9) Ladror, U; J Biol Chem 1994, V269, P18422 HCAPLUS
(10) Lah, T; Breast Cancer Research and Treatment 1996, V39, P221 HCAPLUS
(11) Lee, C; J Am Chem Soc 1998, V120, P9735 HCAPLUS
(12) Parlow, J; Tetrahedron 1998, V54, P4013 HCAPLUS
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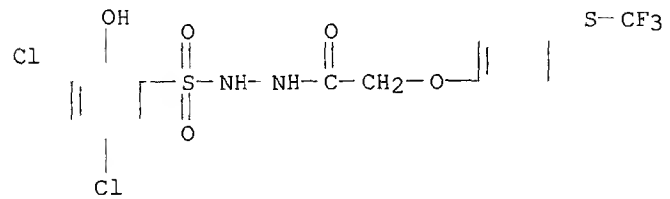
(15) Siegel, M; Tetrahedron Lett 1997, V38, P3357 HCAPLUS
(16) Suto, M; Tetrahedron 1998, V54, P4141 HCAPLUS
(17) Takimoto, S; Bull Chem Soc Jpn 1976, V49, P2335 HCAPLUS
(18) Whitesitt, C; Bioorg Med Chem Lett 1996, V6, P2157 HCAPLUS

IT **258520-21-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of amide library)

RN 258520-21-7 HCAPLUS

CN Acetic acid, [4-[(trifluoromethyl)thio]phenoxy]-, 2-[(3,5-dichloro-2-hydroxyphenyl)sulfonyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:525097 HCAPLUS

DN 131:299352

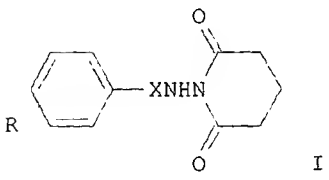
TI Synthesis and biological activity of acyl- and sulfonylhydrazides of glutaric acid and its imides and salts

AU Chernikh, V. P.; Shemchuk, L. A.; Gritsenko, I. S.; Ivanova, I. L.; Goryachii, V. D.; Tyukin, N. M.; Kovalenko, S. M.

CS Ukr. Farm. Akad., Ukraine

SO Farmatsevtichnii Zhurnal (Kiev) (1998), (3), 46-50
CODEN: FRZKAP; ISSN: 0367-3057

PB Zdorov'ya
DT Journal
LA Ukrainian
CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, **25**
GI



I

AB Title compds. such as RC6H4XNHNHCO(CH2)3CO2R1 (R = 4-NO2, 4-Br, 2-OH, 4-MeO, 4-Cl, 4-AcNH; X = CO, SO2; R1 = H, Na) and I (same R, X) were prepd. The compds. formed showed moderate diuretic, antiinflammatory, and analgesic activities.

ST glutaric acid acylhydrazide sulfonylhydrazide prepn bioactivity; glutarimide benzamido benzenesulfonamido prepn bioactivity; diuretic glutaric hydrazide glutarimide deriv; antiinflammatory glutaric hydrazide glutarimide deriv; analgesic glutaric hydrazide glutarimide deriv

IT Analgesics
Anti-inflammatory agents
Diuretics
(acyl- and sulfonylhydrazides of glutaric acid and its imides and salts)

IT 161871-51-8P 161871-54-1P 161871-55-2P 162104-36-1P 162104-37-2P
182806-15-1P 182806-16-2P 182806-17-3P 182806-18-4P 182806-19-5P
247044-57-1P 247044-58-2P 247044-59-3P 247044-60-6P 247044-61-7P
247044-62-8P 247044-63-9P 247044-64-0P 247046-08-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and bioactivity of)

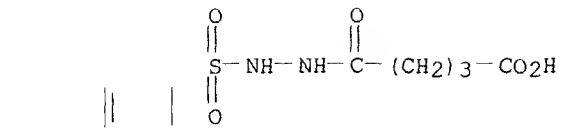
IT 209961-08-0P 247044-50-4P 247044-51-5P **247044-52-6P**
247044-53-7P 247044-54-8P 247044-55-9P **247044-56-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn., cyclization, and bioactivity of)

IT 108-55-4, Glutaric anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with benzoyl and benzenesulfonyl hydrazides)

IT 80-17-1D, Benzenesulfonyl hydrazide, derivs. 613-94-5D, Benzoic acid hydrazide, derivs.
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with glutaric anhydride)

IT **247044-52-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn., cyclization, and bioactivity of)

RN 247044-52-6 HCAPLUS
CN Pentanedioic acid, mono[2-[(4-methoxyphenyl)sulfonyl]hydrazide] (9CI) (CA INDEX NAME)



MeO

L48 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:42740 HCAPLUS
DN 130:110060
TI Preparation of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release.
IN Broadhurst, Michael John; Johnson, William Henry; Walter, Daryl Simon
PA F. Hoffmann-La Roche A.-G., Switz.
SO Ger. Offen., 64 pp.
CODEN: GWXXBX
DT **Patent**
LA German
IC ICM C07C311-49
ICS C07C259-06; C07C243-26; A61K031-195; A61K031-18; A61K031-505; C07D309-12; C07D227-02; C07D247-02; C07D333-06; C07D335-02; C07D277-62
ICA C07D521-00
CC 25-22 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**, 27, 28
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19829229	A1	19990107	DE 1998-19829229	19980630
	US 6235787	B1	20010522	US 1998-98235	19980616
	WO 9901428	A1	19990114	WO 1998-EP3683	19980618
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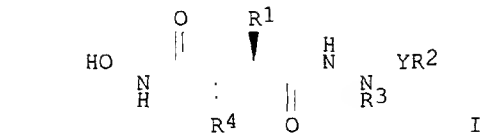
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9886273	A1	19990125	AU 1998-86273	19980618
	AU 725039	B2	20001005		
	EP 993442	A1	20000419	EP 1998-937498	19980618
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 9810952	A	20000926	BR 1998-10952	19980618
	JP 2000513750	T2	20001017	JP 1999-506230	19980618
	ZA 9805469	A	19981230	ZA 1998-5469	19980623
	IT 1301792	B1	20000707	IT 1998-MI1441	19980624
	FR 2765219	A1	19981231	FR 1998-8124	19980626
	FR 2765219	B1	19991029		
	GB 2326881	A1	19990106	GB 1998-14027	19980629
	ES 2140348	A1	20000216	ES 1998-1359	19980629
	ES 2140348	B1	20001016		
	MX 9911668	A	20000531	MX 1999-11668	19991214
	NO 9906534	A	20000223	NO 1999-6534	19991229
PRAI	GB 1997-13833	A	19970630		
	GB 1998-3335	A	19980217		
	WO 1998-EP3683	W	19980618		

OS MARPAT 130:110060
GI



AB Title compds. [I; Y = CO, SO2; R1 = alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl; R2 = alkyl, haloalkyl, aralkyl, aralkenyl, aryl, alkoxy, alkoxycarbonyl, etc.; R3 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, aralkyl, aralkenyl, aryl, heterocyclyl; R2R3 = 5-7 membered cyclic amide, imide, sulfonamide, or urethane; R4 = alkyl, alkenyl, cycloalkylalkyl, ArX, HetX, etc.; Ar = aryl; Het = heteroaryl; X = spacer], were prepd. Thus, (E)-2(R)-[1(S)-(hydroxycarbamoyl)-4-phenyl-3-butenyl]-2'-(methanesulfonyl)-4-methyl-2'-phenylvalerohydrazide (multistep prepn. given) inhibited TNF.alpha. and TGF.alpha. release with IC50 = 437 nM and 210 nM, resp.

ST hydroxycarbamoylalkylcarboxylic acid hydrazide prepn TNF TGF release inhibitor; tumor necrosis factor release inhibitor hydroxycarbamoylalkylcarboxylic acid hydrazide; transforming growth factor release inhibitor hydroxycarbamoylalkylcarboxylic acid hydrazide; antiinflammatory hydroxycarbamoylalkylcarboxylic acid hydrazide; antiarthritic hydroxycarbamoylalkylcarboxylic acid hydrazide

IT Anti-inflammatory agents
Antiarthritics
Antipyretics
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT Hydrazides
Hydroxamic acids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT Hemorrhage
Multiple sclerosis
Psoriasis
Sepsis
(treatment; prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT Transforming growth factors
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(.alpha.-; prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT 219612-20-1P 219612-22-3P 219612-25-6P 219612-27-8P 219612-31-4P
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219612-48-3P 219612-49-4P 219612-51-8P 219612-52-9P 219612-54-1P
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219614-18-3P 219614-20-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT 65-85-0, Benzoic acid, reactions 67-64-1, Acetone, reactions 78-84-2, Isobutyraldehyde 79-22-1, Methyl chloroformate 85-44-9, 1,3-Isobenzofurandione 90-11-9, 1-Bromonaphthalene 96-32-2, Methyl bromoacetate 97-72-3, Isobutyric anhydride 98-68-0, 4-Methoxybenzenesulfonyl chloride 98-88-4, Benzoyl chloride 100-39-0, Benzyl bromide 100-63-0, Phenylhydrazine 103-71-9, Phenyl isocyanate, reactions 103-80-0, Phenylacetyl chloride 106-95-6, Allyl bromide, reactions 108-12-3, Isopentanoyl chloride 108-24-7 108-55-4, Glutaric anhydride 109-90-0, Ethyl isocyanate 110-02-1, Thiophene 120-92-3, Cyclopentanone 407-25-0, Trifluoroacetic anhydride 501-53-1, Benzyl chloroformate 502-42-1, Cycloheptanone 527-72-0, Thiophene-2-carboxylic acid 529-27-1, o-Tolylhydrazine 534-00-9, (S)-1-Bromo-2-methylbutane 540-51-2, 2-Bromoethanol 585-70-6, 5-Bromo-2-furoic acid 589-21-9, 4-Bromophenylhydrazine 622-33-3, O-Benzylhydroxylamine 630-19-3, Pivaldehyde 637-33-2, 3-Hydroxybenzylhydrazine 637-59-2, 1-Bromo-3-phenylpropane 870-46-2, tert-Butyl carbazate 890-98-2, Benzyl mandelate 932-86-5, 2-Bromoethylidenecyclohexane 939-26-4, 2-Bromomethylnaphthalene 1072-72-6, Tetrahydrothiopyran-4-one 1633-82-5, 3-Chloropropylsulfonyl chloride 1633-84-7, 4-Chloro-1-butanesulfonyl chloride 1939-99-7, Benzylsulfonyl chloride 2243-55-2, 1-Naphthylhydrazine 2386-60-9, 1-Butanesulfonyl chloride 2719-27-9, Cyclohexanecarbonyl chloride 3240-94-6, 4-(2-Chloroethyl)morpholine 4392-24-9, Cinnamyl bromide 4595-59-9 4801-27-8, 2-Bromoethyl chloroformate 4930-98-7, 2-Hydrazinopyridine 5781-53-3, Methyl oxalyl chloride 6482-24-2, 2-Bromoethyl methyl ether 6498-34-6, Cyclohexylhydrazine 6723-30-4 7051-34-5, Cyclopropylmethyl bromide 14190-59-1, 2-Thiazolecarboxylic acid 16629-19-9, Thiophene-2-sulfonyl chloride 21038-22-2, O-(4-Methoxybenzyl)hydroxylamine 21378-20-1 21691-53-2 29943-42-8, Tetrahydropyran-4-one 32064-67-8, tert-Butylhydrazine 37137-00-1,

2-Iodoethoxybenzene 40299-87-4, N-Bromoacetylmorpholine 41014-27-1, 2-Bromomethylbenzofuran 41879-39-4, O-tert-Butyldimethylsilylhydroxylamine 42504-87-0, Isobutylhydrazine 42726-73-8, tert-Butyl methyl malonate 73870-24-3, 4-Bromomethylpyridine hydrobromide 75059-04-0, 4-Nitrocinnamyl bromide 79099-07-3, 1-tert-Butoxycarbonyl-4-piperidone 81701-30-6 87808-24-0 112245-04-2 112306-59-9 115754-94-4 134807-43-5 148415-75-2 157604-22-3 184948-24-1 191613-94-2 204637-77-4 219615-70-0 219615-71-1 219615-72-2 219615-73-3 219615-74-4 219615-75-5 219615-76-6 219615-77-7 219615-78-8 219615-79-9 219615-80-2 219615-81-3 219615-82-4 219615-83-5 219615-84-6 219615-85-7 219615-86-8 219615-88-0 219615-89-1 219615-90-4 219615-91-5 219615-92-6 219615-93-7 219615-95-9 219616-01-0 219616-02-1 219616-03-2 219616-04-3 219616-05-4 219616-06-5 219616-07-6 219616-08-7 219616-09-8 219616-10-1 219616-11-2 219616-12-3 219616-13-4 219616-14-5 219616-15-6 219616-16-7 219616-17-8 219616-18-9 219616-19-0 219616-20-3 219616-21-4 219616-22-5 219616-23-6 219616-24-7 219616-25-8 219616-26-9 219616-27-0 219616-29-2 219616-30-5 219616-31-6 219616-32-7 219616-33-8 219616-34-9 219616-35-0 219616-39-4 219616-40-7 219621-15-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

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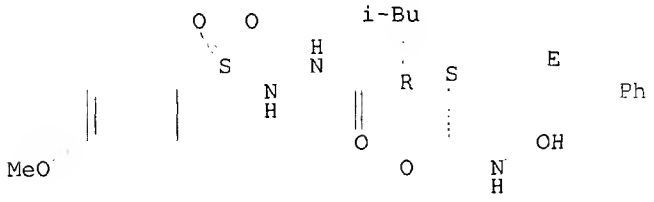
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

IT **219613-64-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic**

use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydroxycarbamoylalkylcarboxylic acid hydrazides as inhibitors of tumor necrosis factor and transforming growth factor release)

RN 219613-64-6 HCAPLUS
CN 5-Hexenoic acid, 3-[(hydroxyamino)carbonyl]-2-(2-methylpropyl)-6-phenyl-, 2-[(4-methoxyphenyl)sulfonyl]hydrazide, (2R,3S,5E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



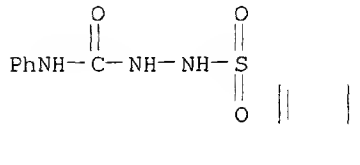
L48 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:144326 HCAPLUS
DN 128:192426
TI Synthesis and antineoplastic activity of 1-(4-toluensulfonyl)-4-arylsemicarbazides
AU Asis, Silvia E.; Bruno, Ana M.; Gaozza, Carlos H.
CS Centro Sintesis y Estudio de Nuevos Compuestos Antineoplasicos, Departamento de Quimica Organica, Facultad de Farmacia y Bioquimica, Universidad de Buenos Aires, Buenos Aires, 1113, Argent.
SO Acta Farmaceutica Bonaerense (1997), 16(4), 209-214
CODEN: AFBODJ; ISSN: 0326-2383
PB Colegio de Farmaceuticos de la Provincia de Buenos Aires
DT Journal
LA Spanish
CC 25-21 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**
AB 4-MeC6H4SO2NHNHCONHC6H4R [R = H, 4-Cl, 4-Me, 4-OMe, 3-CF3, 4-NO2; C6H4R = 1-naphthyl], structurally related to the Sulofenur family, were synthesized from RC6H4NCS and 4-MeC6H4SO2NHNH2, followed by oxidn., or directly from RC6H4NCO, and evaluated as antineoplastic agents. 4-MeC6H4SO2NHNHCONHC6H4NO2-4 (I) was active against a variety of human tumors. DNA binding was assayed employing an improved UV method and all compds. exhibited no affinity to calf thymus DNA. Redox properties of I were also studied by cyclic voltammetry.
ST aryltosylsemicarbazide prepn antineoplastic; semicarbzide aryltosyl prepn antineoplastic
IT Antitumor agents
(prepn. and antineoplastic activity of aryl(toluensulfonyl)semicarbazides)
IT **28744-07-2P 131574-09-9P 131574-10-2P 203718-68-7P 203718-69-8P 203718-70-1P 203718-71-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antineoplastic activity of aryl(toluensulfonyl)semicarbazides)
IT 86-84-0, 1-Naphthyl isocyanate 100-28-7, 4-Nitrophenyl isocyanate 103-72-0, Phenyl isothiocyanate 622-59-3, 4-Methylphenyl isothiocyanate 1576-35-8, Tosylhydrazine 1840-19-3, 3-Trifluoromethylphenyl

isothiocyanate 2131-55-7, 4-Chlorophenyl isothiocyanate 2284-20-0, 4-Methoxyphenyl isothiocyanate
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and antineoplastic activity of aryl(toluensulfonyl)semicarbazides)

IT **28744-12-9P 66884-27-3P 66884-29-5P 66884-32-0P 203718-74-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and antineoplastic activity of aryl(toluensulfonyl)semicarbazides)

IT **28744-07-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antineoplastic activity of aryl(toluensulfonyl)semicarbazides)

RN 28744-07-2 HCAPLUS
CN Hydrazinecarboxamide, 2-[(4-methylphenyl)sulfonyl]-N-phenyl- (9CI) (CA INDEX NAME)

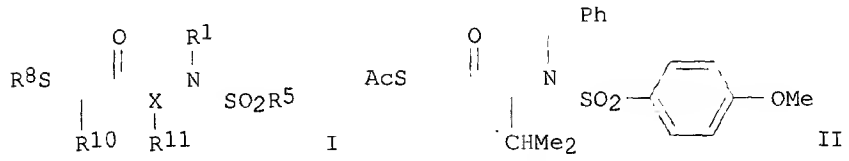


L48 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1997:684387 HCAPLUS
DN 127:331751
TI Preparation of peptidyl compounds having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity
IN Baxter, Andrew Douglas; Owen, David Alan; Montana, John Gary; Watson, Robert John; Keily, John Fraser
PA Chiroscience LLtd., UK; Baxter, Andrew Douglas; Owen, David Alan; Montana, John Gary; Watson, Robert John; Keily, John Fraser
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM C07D209-48
ICS C07C323-60; C07C327-32; A61K031-18; A61K031-22; A61K031-40
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): **1, 25, 63**

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9737973	A1	19971016	WO 1997-GB957	19970404
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2247964	AA	19971016	CA 1997-2247964	19970404
	AU 9723023	A1	19971029	AU 1997-23023	19970404

AU 718438 B2 20000413
EP 891328 A1 19990120 EP 1997-915605 19970404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
JP 2000508639 T2 20000711 JP 1997-535962 19970404
US 6114372 A 20000905 US 1998-155695 19981002
PRAI GB 1996-7119 A 19960404
WO 1997-GB957 W 19970404
OS MARPAT 127:331751
GI



AB Peptidyl compds. I [X = CH, N; R1 = C1-6 alkyl, C2-6 alkenyl, aryl, C1-6 alkylaryl, heteroaryl, C1-6 alkylheteroaryl, C3-6 cycloalkyl, C1-6 alkyl-C3-6 cycloalkyl, C4-6 heterocycloalkyl, C1-6 alkyl-C4-6 heterocycloalkyl, C1-6 alkyl-COR2, C1-6 alkyl-AR3; A = O, NR3, S(O)n; n = 0-2; R3 = H, C1-4 alkyl, aryl, heteroaryl, C1-4 alkylaryl, C1-4 alkylheteroaryl; R2 = OR4, NR42; R4 = H, C1-4 alkyl; R5 = optionally R6-substituted aryl, heteroaryl, C1-4 alkylaryl, C1-4 alkylheteroaryl, C1-4 alkyl-C3-6 cycloalkyl, C4-6 heterocycloalkyl, C1-4 alkyl-C4-6 heterocycloalkyl; R6 = halo, C1-6 alkyl, aryl, heteroaryl, AR3, NR3R7, COR9, SO2NR32, COR4, CONR32, amidine, guanidine; R7 = substituted acyl, alkoxycarbonyl, sulfonyl, aminocarbonyl; R8 = H, COR9; R9 = C1-4 alkyl, aryl, heteroaryl, C1-4 alkylaryl, C1-4 alkylheteroaryl; R10, R11 = independently H, optionally substituted C1-6 alkyl, aryl, C1-6 alkylaryl, heteroaryl, C1-6 alkylheteroaryl, C3-6 cycloalkyl, C1-6 alkyl-C3-6 cycloalkyl, C4-6 heterocycloalkyl, C1-4 alkyl-C4-6 heterocycloalkyl], and salt, solvates, and hydrates thereof, having matrix metalloproteinase (MMP) and tumor necrosis factor .alpha. (TNF.alpha.) inhibitory activity are described. Thus, sequential reaction of N-benzyl-N-(4-methoxyphenylsulfonyl)-DL-valine (prepn. from DL-valine given) with CH2N2 and HBr gave bromomethyl ketone II, (R = Br), which underwent substitution with potassium thioacetate to give acetylmercapto deriv. II (R = SAc).

ST matrix metalloproteinase inhibitor peptidyl thiol prepn; tumor necrosis factor peptidyl inhibitor prepn

IT Tumor necrosis factors
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

IT **197965-84-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

IT **197965-83-6P** 197965-85-8P **197965-86-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

IT 141907-41-7, Matrix metalloproteinase 177529-10-1, L-Selectin sheddase
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL

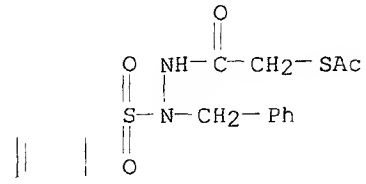
(Biological study)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

IT 98-68-0, 4-Methoxybenzenesulfonyl chloride 516-06-3, DL-Valine 10387-40-3, Potassium thioacetate 10553-78-3, Acetylthioacetyl chloride 20570-96-1, Benzylhydrazine dihydrochloride 179090-37-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

IT 197965-87-0P **197965-88-1P** 197965-89-2P 197965-90-5P 197965-91-6P 197965-92-7P 197965-93-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

IT **197965-84-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); **THU (Therapeutic use)**; **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptidyl compds. having matrix metalloproteinase and tumor necrosis factor .alpha. inhibitory activity)

RN 197965-84-7 HCAPLUS
CN Acetic acid, (acetylthio)-, 2-[(4-methoxyphenyl)sulfonyl]-2-(phenylmethyl)hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN **1997:421308** HCAPLUS
DN **127:34521**
TI Preparation of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors
IN Carr, Thomas Joseph; Desjarlais, Renee Louise; Gallagher, Timothy Francis; Halbert, Stacie Marie; Oh, Hye-Ja; Thompson, Scott Kevin; Veber, Daniel Frank; Yamashita, Dennis Shinji; et al.
PA USA
SO PCT Int. Appl., 253 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM C07D277-56
ICS A61K031-425
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): **1**, 28
FAN.CNT 5

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9716433	A1	19970509	WO 1996-US18000	19961030

W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, US, US, US, US, US, US, US, US, US, US, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	ZA 9609078	A	19980429	ZA 1996-9078	19961029
	AU 9711180	A1	19970522	AU 1997-11180	19961030
	CN 1207095	A	19990203	CN 1996-199284	19961030
	BR 9612344	A	19990713	BR 1996-12344	19961030
	EP 934291	A1	19990811	EP 1996-941981	19961030
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
	NO 9801938	A	19980629	NO 1998-1938	19980429
	US 5998470	A	19991207	US 1999-290958	19990413
	US 6057362	A	20000502	US 1999-330287	19990611
	US 6232342	B1	20010515	US 1999-330451	19990611
	US 6284777	B1	20010904	US 2000-552616	20000419
	US 6331542	B1	20011218	US 2000-551968	20000419
	NO 2000006716	A	19980629	NO 2000-6716	20001229
	NO 2000006717	A	19980629	NO 2000-6717	20001229
	NO 2000006718	A	19980629	NO 2000-6718	20001229
	CN 1341590	A	20020327	CN 2001-104787	20010220
	CN 1341592	A	20020327	CN 2001-104788	20010220
	CN 1341593	A	20020327	CN 2001-104789	20010220
	US 2002077455	A1	20020620	US 2001-839410	20010420
	US 2002173469	A1	20021121	US 2002-160314	20020530
PRAI	US 1995-8108P	P	19951030		
	US 1995-7473P	P	19951122		
	US 1995-8992P	P	19951221		
	US 1996-13747P	P	19960320		
	US 1996-13748P	P	19960320		
	US 1996-13764P	P	19960320		
	US 1996-17455P	P	19960517		
	US 1996-17892P	P	19960517		
	US 1996-22047P	P	19960722		
	US 1996-23494P	P	19960807		
	WO 1996-US18000	W	19961030		
	US 1997-793915	A3	19970214		
	US 1998-793915	B3	19980430		
	US 1999-330284	B1	19990611		
	US 1999-330305	B1	19990611		
	US 2000-633700	B1	20000807		

OS MARPAT 127:34521

AB Title compds. of formula D-CO-Q [D = CbzNHCH(Bu-i), Cbz-Leu-NHCH(Bu-i), 4-PhOC6H4SO2NHCH2, Cbz-Leu-NHNH, etc.; Q = NHCH(Bu-i)(2-carboxythiazol-4-yl), NHCH(Bu-i)(4-carboethoxythiazol-2-yl), NHNHCOCH(Bu-i)NHCbz, CH2NHSO2C6H4-4-OPh, etc.; Cbz = PhCH2O2C] and pharmaceutical compns. of such compds., which inhibit proteases, including cathepsin K (no data) were prepd. Such compds. are particularly useful for treating diseases of excessive bone loss or cartilage or matrix degrdn., e.g. osteoporosis, periodontitis, and arthritis. For example, Cbz-Leu-Leu-CH2Br was treated with H2NCSCO2Et in refluxing ethanol for 4 h to give Cbz-Leu-NHCH(Bu-i)(2-carboethoxythiazol-4-yl), which was sapond. by treatment with sodium hydroxide in THF to yield title compd. Cbz-Leu-NHCH(Bu-i)(2-carboxythiazol-4-yl).

ST peptidyl hydrazide prepn protease inhibitor; cathepsin K inhibitor peptide analog prepn

IT Cartilage
Cartilage
(degeneration; prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors for treating)

IT Gingiva
(gingivitis; prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors for treating)

IT Periodontium

(periodontitis; prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors for treating)

IT Peptides, preparation
Peptidomimetics
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl)

IT Hydrazides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

IT Bone, disease
Osteoarthritis
Osteoporosis
Rheumatoid arthritis
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors for treating)

IT 3069-78-1P 190141-94-7P 190141-95-8P 190141-96-9P 190141-97-0P
190141-98-1P 190142-16-6P 190142-17-7P 190142-18-8P 190657-00-2P
190657-01-3P 190657-02-4P 190657-03-5P 190657-04-6P 190657-05-7P
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190657-16-0P 190657-17-1P 190657-18-2P 190657-19-3P 190657-20-6P
190657-21-7P 190657-22-8P 190657-23-9P 190657-24-0P 190657-25-1P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

IT 190659-80-4P 190659-82-6P 190659-84-8P 190659-86-0P 190659-88-2P
190659-90-6P 190659-92-8P 190659-94-0P 190659-95-1P 190659-97-3P
190659-99-5P 190660-01-6P 190660-03-8P 190660-05-0P 190660-08-3P
190660-10-7P 190660-12-9P 190660-14-1P 190660-16-3P 190660-18-5P
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190660-50-5P 190660-52-7P 190660-54-9P 190660-56-1P 190660-58-3P
190660-60-7P 190660-62-9P 190660-63-0P 190660-64-1P 190660-65-2P
190660-66-3P 190660-67-4P 190660-68-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

IT 37353-41-6, Cysteine protease 94716-09-3, Cathepsin k
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

IT 55-22-1, Isonicotinic acid, reactions 64-04-0, 2-Phenylethylamine
70-23-5, Ethyl bromopyruvate 85-48-3, 8-Quinoline sulfonic acid
86-59-9, 8-Quinoline carboxylic acid 86-76-0, 2-Bromodibenzofuran
92-67-1, 4-Aminobiphenyl 92-92-2, 4-Phenylbenzoic acid 95-56-7,
2-Bromophenol 97-69-8, N-Acetyl-alanine 98-80-6, Phenylboronic acid
98-97-5, Pyrazinecarboxylic acid 98-98-6, Picolinic acid 99-76-3,
Methyl 4-hydroxybenzoate 100-09-4, 4-Methoxybenzoic acid 100-55-0,
3-Pyridyl carbinol 101-55-3, 4-Phenoxyphenyl bromide 104-98-3
107-11-9, Allylamine 110-91-8, Morpholine, reactions 110-96-3
123-90-0, Thiomorpholine 475-11-6, N-Methyl-proline 501-52-0,
Hydrocinnamic acid 501-53-1, Benzyl chloroformate 501-89-3,
4-Carboxymethyl benzoic acid 532-55-8, Benzoyl isothiocyanate
541-53-7, Dithiobiuret 556-52-5, Glycidol 578-57-4, 2-Bromoanisole
586-95-8, 4-Pyridylcarbinol 586-98-1, 2-Pyridylcarbinol 616-29-5,
1,3-Diamino-propan-2-ol 625-43-4, N-Methylisobutylamine 627-37-2,
N-Methyl-N-allylamine 645-65-8, 4-Imidazolylacetic acid 646-07-1,
4-Methylpentanoic acid 1066-45-1, Trimethyltin chloride 1115-59-9
1118-68-9, N,N-Dimethylglycine 1123-00-8, Cyclopentylacetic acid
1129-28-8, Methyl 3-(bromomethyl)benzoate 1138-80-3 1142-20-7
1148-11-4 1161-13-3 1188-21-2, N-Acetyl-leucine 1586-00-1,
2-Benzylbenzyl alcohol 1592-38-7, 2-Naphthalenemethanol 1621-91-6,
1H-Pyrazole-3-carboxylic acid 1878-67-7, 3-Bromophenylacetic acid
2018-66-8, N-Benzyloxycarbonyl-leucine 2113-57-7 2113-68-0, 4-Biphenyl sulfonic acid 2150-44-9, Methyl 3,5-dihydroxybenzoate 2215-77-2,
4-Phenoxybenzoic acid 2417-72-3, Methyl 4-(bromomethyl)benzoate
2637-34-5, 2-Mercaptopyridine 2817-13-2 2928-43-0, 2-Biphenylmethanol
2991-28-8, 2,5-Difluorobenzoic acid 3017-69-4, Isobutenyl bromide
3060-46-6, N-Methyl-leucine 3179-63-3 3731-53-1, 4-Pyridylmethylamine
3886-08-6 4530-20-5 4688-76-0, 2-Biphenylboronic acid 4755-77-5,
Ethyl oxalyl chloride 5292-21-7, Cyclohexylacetic acid 5455-98-1,
N-(2,3-Epoxypropyl)phthalimide 5555-13-5 5651-55-8,
3-Benzyloxy-4,5-dimethoxybenzoic acid 5728-52-9, 4-Biphenylacetic acid
7764-95-6 7801-71-0 10349-57-2, 6-Quinoline carboxylic acid
13826-35-2, 3-Phenoxybenzyl alcohol 13922-41-3, 1-Naphthyl boronic acid

14389-86-7, 2-Benzyloxybenzoic acid 15159-40-7, 4-Morpholinecarbonyl chloride 15761-38-3 16567-18-3, 8-Bromoquinoline 16982-21-1, Ethyl thiooxamate 18704-37-5, 8-Quinolinesulfonyl chloride 19438-10-9, Methyl 3-hydroxybenzoate 21691-44-1, N-Benzyloxycarbonyl-norvaline 23095-31-0, 3,4-Dimethoxy-phenyl-sulfonyl chloride 23602-98-4, 2-Dibenzofuransulfonyl chloride 26389-60-6, N-Cyclopropylmethylpropylamine 28862-79-5, N-Benzyloxycarbonyl-D-leucine 32316-92-0, 2-Naphthylboronic acid 33099-08-0 35661-60-0 39608-30-5 42918-86-5 53363-89-6 56946-83-9, 2,5-Dichlorothiophene-3-sulfonyl chloride 65489-71-6 68947-43-3, N-Methyl-piperidine-4-carboxylic acid 83863-63-2, 2-Dibenzofuran-sulfonic acid 88398-93-0 127862-86-6 161994-06-5, Propanedithiol 166964-37-0 175136-72-8 190661-76-8 190661-77-9 190661-78-0 190661-79-1 190661-80-4 190661-81-5 190661-82-6 190661-83-7 190661-85-9 190901-07-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

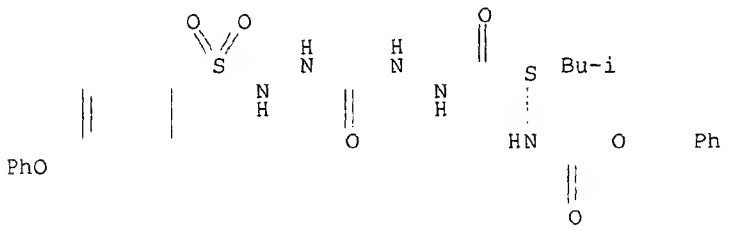
IT 1623-92-3P 1623-93-4P, [1,1'-Biphenyl]-4-sulfonyl chloride 3504-37-8P 4801-79-0P 7320-78-7P 13990-98-2P 17113-77-8P, 2-Trimethylstannylanisole 18153-53-2P 19520-74-2P 20777-79-1P 21347-31-9P 23948-77-8P, [1,1'-Biphenyl]-3-acetic acid 27383-13-7P 31575-75-4P 35026-08-5P 39570-63-3P 42384-22-5P 50637-26-8P 50637-27-9P 51021-87-5P 53085-26-0P, Ethyl oxalamidrazonate 63096-02-6P 65685-01-0P, [1,1'-Biphenyl]-3-sulfonyl chloride 66715-65-9P, 2-Pyridinesulfonyl chloride 67451-81-4P 68314-54-5P 69026-14-8P 70533-96-9P 73018-98-1P 75852-28-7P 77284-59-4P 79678-37-8P 89376-18-1P 96929-05-4P 99701-60-7P 100367-77-9P 101190-77-6P 111946-78-2P 111946-80-6P 115299-16-6P 115311-36-9P 118252-75-8P 118252-77-0P 127942-30-7P 140157-44-4P 144255-33-4P 150529-73-0P 154739-53-4P 168431-73-0P 171861-74-8P 172092-34-1P 186693-25-4P 189811-19-6P 190142-08-6P 190142-09-7P 190142-10-0P 190142-11-1P 190142-12-2P 190142-13-3P 190142-14-4P 190142-15-5P 190660-69-6P 190660-70-9P 190660-72-1P 190660-73-2P 190660-74-3P 190660-75-4P 190660-76-5P 190660-77-6P 190660-78-7P 190660-79-8P 190660-81-2P 190660-82-3P 190660-83-4P 190660-84-5P 190660-85-6P 190660-86-7DP, resin-bound 190660-87-8DP, resin-bound 190660-88-9P 190660-89-0P 190660-90-3P 190660-91-4P 190660-92-5P 190660-93-6P 190660-94-7P 190660-95-8P 190660-97-0P 190660-99-2P 190661-01-9P 190661-03-1P 190661-08-6P 190661-10-0P 190661-13-3P 190661-15-5P 190661-17-7P 190661-19-9P 190661-20-2P 190661-22-4P 190661-24-6P 190661-25-7P 190661-26-8P 190661-27-9P 190661-28-0P 190661-29-1P 190661-30-4P 190661-31-5P 190661-32-6P 190661-33-7P 190661-34-8P 190661-35-9P 190661-36-0P 190661-37-1P 190661-38-2P 190661-39-3P 190661-40-6P 190661-41-7P 190661-42-8P 190661-43-9P 190661-44-0P 190661-45-1P 190661-46-2P 190661-47-3P 190661-48-4P 190661-49-5P 190661-50-8P 190661-51-9P 190661-52-0P 190661-53-1P 190661-54-2P 190661-55-3P 190661-56-4P 190661-57-5P 190661-58-6P 190661-60-0P 190661-61-1P 190661-62-2P 190661-63-3P 190661-64-4P 190661-65-5P 190661-66-6P 190661-67-7P 190661-68-8P 190661-69-9P 190661-70-2P 190661-71-3P 190661-72-4P 190661-73-5P 190661-74-6P 190661-75-7P 190900-97-1DP, resin-bound 190900-99-3DP, resin-bound 190901-05-4DP, resin-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

IT **190657-73-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

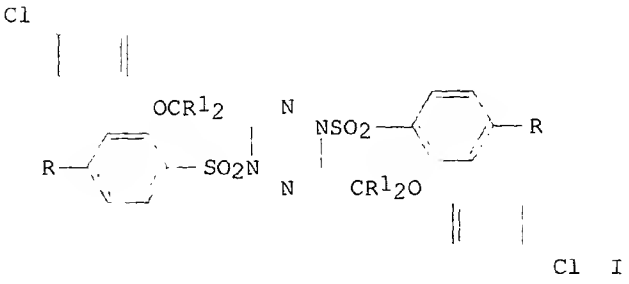
RN 190657-73-9 HCAPLUS

CN L-Leucine, N-[(phenylmethoxy)carbonyl]-, 2-[[2-[(4-phenoxyphenyl)sulfonyl]hydrazino]carbonyl]hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



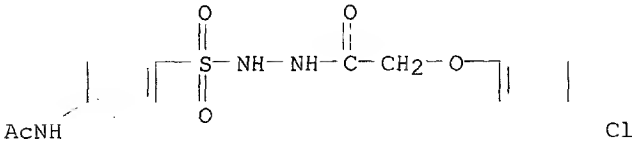
L48 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1989:212780 HCAPLUS
DN 110:212780
TI Synthesis and biological activity of 1-(p-chlorophenoxyalkanoyl)-2-arylsulfonylhydrazines and 3,6-di(p-chlorophenoxyalkyl)-1,4-diarylsulfonyl-1,4-dihydro-1,2,4,5-tetrazines
AU Nageswar, Y. V. D.; Murty, M. S. R.; Rao, A. Bhaskara; Ramalingam, T.; Sattur, P. B.
CS Reg. Res. Lab., Hyderabad, 500 007, India
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1988), 27B(11), 1057-9
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
CC 28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): **1, 25**
OS CASREACT 110:212780
GI



Cl I

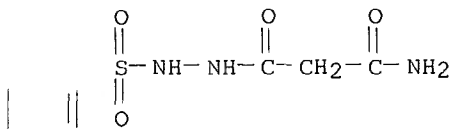
AB A no. of title hydrazines 4-RC6H4SO2NHNHCOCR12OC6H4Cl-4 (R = H, Me, Cl, NHAc, R1 = H, Me) and a few title tetrazines I (R = H, Me, R1 = H, Me) were prepd. and screened for their biol. activities. Some of the compds. exhibit mild to moderate hypoglycemic and antiinflammatory activities.
ST chlorophenoxyalkanoylarylsulfonylhydrazine prepn hypoglycemic antiinflammatory; tetrazine bischlorophenoxyalkyl diarylsulfonyl hypoglycemic antiinflammatory
IT Antidiabetics and Hypoglycemics
Inflammation inhibitors
((chlorophenoxyalkanoyl)arylsulfonylhydrazines and bis(chlorophenoxyalkanoyl)diarylsulfonyldihydrotetrazines as)
IT 98-09-9, Phenylsulfonyl chloride 98-59-9 98-60-2 121-60-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reactions of, with chlorophenoxyalkanoic acid hydrazides)
IT 2381-75-1, p-Chlorophenoxyacetic acid hydrazide 29771-66-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reactions of, with phenylsulfonyl chlorides)
IT 120513-12-4P 120513-13-5P 120513-14-6P 120513-15-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and cyclodimerization of, with base)
IT **37049-73-3P** 120513-09-9P 120513-10-2P **120513-11-3P**
120513-16-8P 120513-17-9P 120513-18-0P 120513-19-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hypoglycemic and antiinflammatory activities of)
IT **34088-34-1P** 120513-06-6P 120513-07-7P **120513-08-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., chlorodehydration, and hypoglycemic and antiinflammatory activities of)
IT **37049-73-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hypoglycemic and antiinflammatory activities of)
RN 37049-73-3 HCAPLUS
CN Acetic acid, (4-chlorophenoxy)-, 2-[[4-(acetylamino)phenyl]sulfonyl]hydrazide (9CI) (CA INDEX NAME)



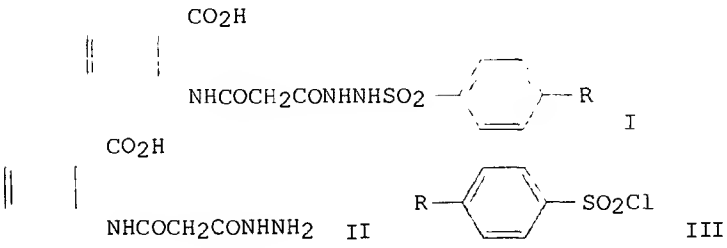
L48 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1988:473104 HCAPLUS
DN 109:73104
TI Synthesis and biological activity of malonic acid arylsulfonhydrazides
AU Chernykh, V. P.; Gritsenko, I. S.; Knyaz, E. M.; Bereznyakova, A. I.; Samura, B. A.
CS Khar'k. Gos. Farm. Inst., Kharkov, USSR
SO Farmatsevtichnii Zhurnal (Kiev) (1987), (6), 57-8
CODEN: FRZKAP; ISSN: 0367-3057
DT Journal
LA Ukrainian
CC 25-19 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**
AB Acylating p-RC6H4SO2NHNH2 (R = MeO, H, O2N, Br, HO2C, H2NSO2) with ClCOCH2CO2Et in dioxane contg. pyridine gave 80-93% p-RC6H4SO2NHNHCOCH2COX (I; same R, X = OEt), which were amidated with aq.-alc. NH3 to give 62-78% I (same R, X = NH2) and sapond. to give 60-78% I (R = MeO, HO2C, H2NSO2; X = OH). I had neurotropic, diuretic and antiinflammatory activity (no data).
ST acylation sulfonhydrazide malonyl chloride; arylsulfonyl malonhydrazide prepn pharmacol; neurotropic arylsulfonyl malonhydrazide; diuretic arylsulfonyl malonhydrazide; antiinflammatory arylsulfonyl malonhydrazide
IT Diuretics
Inflammation inhibitors
Psychotropics
((arylsulfonyl)malonhydrizides)
IT 36239-09-5, Ethyl malonoyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)

(acylation by, of arenesulfonhydrazides)
IT 80-17-1 1950-68-1 2297-64-5 2937-05-5 6391-97-5 114642-58-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with Et malonyl chloride)
IT **115542-32-0P** 115542-33-1P **115542-34-2P** 115542-35-3P
115542-36-4P 115542-37-5P 115542-38-6P
115542-39-7P 115542-40-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and pharmacol. of)
IT 16501-66-9P **115542-27-3P 115542-28-4P** 115542-29-5P
115542-30-8P 115542-31-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., pharmacol., sapon. and amidation of)
IT **115542-32-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and pharmacol. of)
RN 115542-32-0 HCAPLUS
CN Propanoic acid, 3-amino-3-oxo-, 2-[(4-methoxypheny1)sulfonyl]hydrazide (9CI) (CA INDEX NAME)



MeO

L48 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1988:431916 HCAPLUS
DN 109:31916
TI Search for neuroleptic agents among derivatives of .beta.-N-arensulfohydrazides of malonic acid 2-carboxyphenylamide
AU Bezuglyi, P. O.; Treskach, V. I.; Ukrainets, I. V.; Samura, B. A.; Shaporenko, S. V.
CS Kharkov Pharm. Inst., Kharkov, USSR
SO Farmatsevtichnii Zhurnal (Kiev) (1988), (2), 37-40
CODEN: FRZKAP; ISSN: 0367-3057
DT Journal
LA Ukrainian
CC 1-11 (**Pharmacology**)
Section cross-reference(s): **25**
GI



AB Three title compds. (I; R = H, Me, or NHCO2Me) were prepd. by condensation

of II with III (R = H, Me, or NHCO2Me). This was done most effectively in a medium contg. NaOH to absorb evolved HCl. I were of low-to-moderate toxicity in mice. The greatest neuroleptic activity in cats (exceeding that of aminazine) was obsd. with I (R = H). Data on the diuretic activity of I are also presented.

ST sulfohydrazide malonate deriv neuroleptic toxicity

IT Tranquilizers and Neuroleptics
(carboxyphenylamidomalonic acid arensulfohydrazides as)

IT Toxicity
(of carboxyphenylamidomalonic acid arensulfohydrazides)

IT 75205-50-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with aryl sulfonyl chlorides)

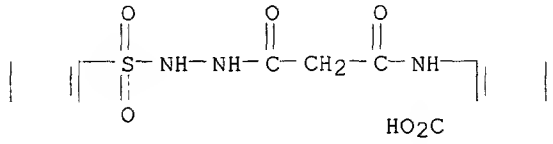
IT 98-09-9, Benzenesulfonyl chloride 98-59-9 21926-53-4
RL: BIOL (Biological study)
(condensation of, with carboxyphenylamidomalonic acid hydrazide)

IT 115150-36-2P **115150-37-3P 115150-38-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and neuroleptic activity of)

IT **115150-37-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and neuroleptic activity of)

RN 115150-37-3 HCAPLUS

CN Benzoic acid, 2-[[3-[2-[(4-methylphenyl)sulfonyl]hydrazino]-1,3-dioxopropyl]amino]- (9CI) (CA INDEX NAME)



L48 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN 1988:221377 HCAPLUS

DN 108:221377

TI Synthesis and biological activity of arylsulfohydrazides of maleic and fumaric acids and methyl esters of arylsulfohydrazides of fumaric acid

AU Chernykh, V. P.; Gritsenko, I. S.; Stavnichuk, S. V.; Bereznyakova, A. I.; Popov, S. B.

CS Kharkov Pharm. Inst., Kharkov, USSR

SO Farmatsevtichnii Zhurnal (Kiev) (1987), (4), 42-5
CODEN: FRZKAP; ISSN: 0367-3057

DT Journal

LA Ukrainian

CC 25-19 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**

AB Treating p-RC6H4SO2NHNH2 (I; R = H, Br, O2N, MeO, HO2C) with maleic anhydride in AcOH gave 71-92% cis-p-RC6H4SO2NHNHCOCH:CHCO2H (cis-II; same R), which could not be esterified with abs. MeOH contg. H2SO4. I (R = Br, O2N, MeO, HO2C, H2NSO2) reacted with trans-MeO2CCH:CHCOCl in dioxane contg. Et3N to give 46-74% trans-p-RC6H4SO2NHNHCOCH:CHCO2Me (III; same R), which were sapond. with 5% aq. NaOH to give 79-86% trans-II (R = O2N, MeO, HO2C, H2NSO2). trans-II (R = H, Me) were prepd. analogously in 86-87% yield from III (same R). The IR spectra and LD50 of II and III were

given. cis-II (R = H, MeO), trans-II (R = MeO, HO2C, H2NSO2) and III (R = MeO) were the only products with antiinflammatory activity, but most II had significant analgesic and anticoagulant activity.

ST sulfohydrazide maleic fumaric prepn pharmacol; hydrazide acyl sulfonyl prepn pharmacol; antiinflammatory acyl sulfonyl hydrazide; analgesic acyl sulfonyl hydrazide; anticoagulant acyl sulfonyl hydrazide

IT Analgesics
Anticoagulants and Antithrombotics
Inflammation inhibitors
(maleic and fumaric sulfohydrazides)

IT Hydrazides
RL: SPN (Synthetic preparation); PREP (Preparation)
(acyl sulfonyl, prepn., toxicity and pharmacol. of)

IT 108-31-6, reactions 17081-97-9, Methyl fumaroyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of arylsulfonyl hydrazides)

IT 1576-35-8, p-Tosyl hydrazide 114642-58-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with Me fumaroyl chloride)

IT 80-17-1, Phenylsulfonyl hydrazide
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with maleic anhydride)

IT 1950-68-1, p-Methoxyphenylsulfonyl hydrazide 2297-64-5, p-Bromophenylsulfonyl hydrazide 2937-05-5, p-Nitrophenylsulfonyl hydrazide 6391-97-5, p-Carboxyphenylsulfonyl hydrazide
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with maleic anhydride and with Me fumaroyl chloride)

IT 100079-79-6P 114642-63-6P **114642-68-1P 114642-69-2P 114642-70-5P 114642-71-6P 114642-72-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., toxicity and pharmacol. of)

IT **114642-64-7P 114642-65-8P 114642-66-9P 114642-67-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., toxicity, pharmacol. and sapon. of)

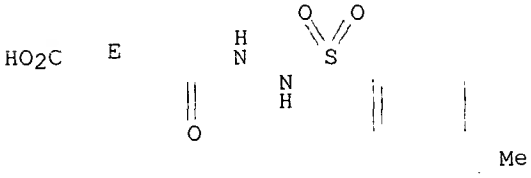
IT 94216-78-1P 114642-59-0P **114642-60-3P 114642-61-4P 114642-62-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., toxicity, pharmacol., and attempted esterification of, with methanol)

IT **114642-68-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., toxicity and pharmacol. of)

RN 114642-68-1 HCAPLUS

CN 2-Butenedioic acid (2E)-, mono[2-[(4-methylphenyl)sulfonyl]hydrazide] (9CI) (CA INDEX NAME)

Double bond geometry as shown.



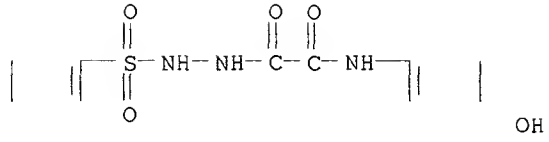
L48 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN 1985:5820 HCAPLUS

DN 102:5820

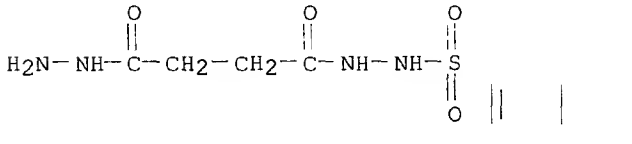
TI Synthesis and cholagogic activity of substituted amides, arenesulfamides,

acyl- and arenesulfohydrazides, of 4-hydroxyoxanylic acid
AU Petyunin, G. P.; Tarusin, A. D.; Drogovoz, S. M.; Filippova, L. I.
CS Ukr. Inst. Usoversh. Vrachei, Kharkov, USSR
SO Khimiko-Farmatsevticheskii Zhurnal (1984), 18(6), 683-6
CODEN: KHFZAN; ISSN: 0023-1134
DT Journal
LA Russian
CC 25-13 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**
OS CASREACT 102:5820
AB p-HOC6H4NHCOCOX (I; X = OEt) reacted with RNH2[R = H, decyl, allyl, PhCH2, o- and p-HOC6H4, 3,4-HO(HO2C)C6H3, PhSO2, p-MeOC6H4SO2, p-H2NC6H4SO2] to give 53-84% I (X = NHR; same R). I (X = NHNH2) reacted with R1Cl (R1 = Ac, Bz, p-MeC6H4CO, PhSO2, p-tosyl, p-AcOC6H4SO2) to give 57-71% I (X = NHNHR1; same R1). The IR and UV spectra and pKa values of I (X = NHR, NHNAR1) were interpreted. All I except I (X = NHCH2CH:CH2, NHSO2C6H4OMe-p) increased bile secretion in white rats, with I [X = NHC6H3(CO2H)OH-4,3](II) having the most activity. I (X = NHSO2C6H2NH2-p) increased cholesterol prodn., while I (X = NHC10H21), II and p-HOC6H4NHCO(CH2)4CONHC6H4-p decreased.
ST choleretic amide sulfonamide hydrazide hydroxyoxanilic; oxanilamide hydroxy amide deriv
IT Choleretics
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydroxyoxanilic amides, arenesulfamides, and acyl- and arenesulfonylhydrazides)
IT Amidation
(of hydroxyoxyanylate, in prepn. of choleretics)
IT 111-50-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of aminophenol, dianilide by)
IT 75-36-5 98-09-9 98-59-9 98-88-4 874-60-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of hydroxyoxanilic hydrazide)
IT 40821-49-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation of, in synthesis of choleretics)
IT 63-74-1 65-49-6 95-55-6 98-10-2 100-46-9, reactions 107-11-9 123-30-8 1129-26-6 2016-57-1 7664-41-7, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation with, of Et hydroxyoxanilate)
IT 10187-22-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and choleretic activity of)
IT 79119-26-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 19532-75-3P 21132-79-6P 93628-82-1P 93628-83-2P 93628-84-3P 93628-85-4P 93628-86-5P 93628-87-6P 93628-88-7P 93628-89-8P 93628-90-1P 93628-91-2P 93628-92-3P 93628-93-4P **93628-94-5P** **93628-95-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., spectra and choleretic activity of)
IT **93628-94-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., spectra and choleretic activity of)
RN 93628-94-5 HCAPLUS
CN Acetic acid, [(4-hydroxyphenyl)amino]oxo-, 2-[(4-methylphenyl)sulfonyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1984:490530 HCAPLUS
DN 101:90530
TI Synthesis and biological activity of aryl- and heterylhydrazones of succinate arenesulfohydrazides
AU Chernykh, V. P.; Gritsenko, I. S.; Zakharova, T. I.; Chubenko, V. O.; Kholupyak, I. Yu.
CS Khark. Derzh. Farm. Inst., Kharkov, USSR
SO Farmatsevtichnii Zhurnal (Kiev) (1984), (2), 64-5
CODEN: FRZKAP; ISSN: 0367-3057
DT Journal
LA Ukrainian
CC 25-19 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**
AB p-RC6H4SO2NHNHCOCH2CH2CONHNZ (I; R = H, Me, MeO, Br, O2N; Z = H2) condensed with R1COR2 (R1 = Ph, 4-MeOC6H4, 2-HOC6H4, 2-furyl, 5-nitro-2-furyl, R2 = H; R1R2C: = isatin-3-ylidene) in refluxing EtOH to give 13 I (Z = :CR1R2; same R-R2) (II) in 80-95% yield. II had moderate diuretic, hypoglycemic, bactericidal and/or fungicidal activity.
ST condensation aldehyde ketone succinic hydrazide; hydrazone arylsulfonylsuccinic prepn pharmacol; diuretic arylsulfonylsuccinic hydrazone; hypoglycemic arylsulfonylsuccinic hydrazone; bactericide arylsulfonylsuccinic hydrazone; fungicide arylsulfonylsuccinic hydrazone
IT Antidiabetics and Hypoglycemics
Bactericides, Disinfectants, and Antiseptics
Diuretics
Fungicides and Fungistats
((arylsulfonyl)succinic hydrazones)
IT Aldehydes, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with (arylsulfonyl)succinic hydrazides)
IT Condensation reaction
(of (arylsulfonyl)succinic hydrazides with aldehydes and ketones)
IT 90-02-8, reactions 91-56-5 98-01-1, reactions 100-52-7, reactions 123-11-5, reactions 698-63-5, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with (arylsulfonyl)succinic hydrazides)
IT 87362-08-1 **87362-09-2** 87362-12-7 **87362-13-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with aldehydes)
IT **87362-10-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with aldehydes and isatin)
IT 87362-15-0P **87362-17-2P 87362-18-3P** 87362-19-4P **87362-20-7P 91511-91-0P 91511-92-1P** **91511-93-2P 91511-94-3P** 91511-95-4P 91511-96-5P **91511-97-6P 91511-98-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and pharmacol. activity of)
IT **87362-09-2**

RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with aldehydes)
RN 87362-09-2 HCAPLUS
CN Butanedioic acid, hydrazide 2-[(4-methylphenyl)sulfonyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1984:209309 HCAPLUS
DN 100:209309
TI Some novel sulfanilyl derivatives
AU Cremlyn, R. J.; Swinbourne, F. J.; Batchelor, A.; Honeyman, R.; Nash, D.; Shode, O. O.; Patel, A.
CS Sch. Nat. Sci., Hatfield Polytech., Hatfield/Hertfordshire, UK
SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1983), 22B(10), 1029-43
CODEN: IJSBDB; ISSN: 0376-4699
DT Journal
LA English
CC 25-19 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**, 5, 10
OS CASREACT 100:209309
AB Benzoic acid anilide and p-chloro, m-nitro, together with the 2,4-, 2,5- and 3,4-dichloro derivs., reacted with chlorosulfonic acid (I) in 1:4 molar ratios to give the corresponding sulfanilyl chlorides. However, nicotinic acid and isonicotinic acid anilides reacted with I, in 1:6 molar ratios only for conversion into the sulfanilyl chlorides. 2,4-Dichlorophenoxyacetic acid anilide reacted with I in 1:3 molar ratios to give the sulfanilyl chloride; this reaction when carried out in 1:7 molar ratios of the reactants gave the disulfonyl chloride. The various sulfanilyl chlorides were treated with amines, azide ion, and hydrazine to give a range of sulfonyl compds. The compds. prepd. have been subjected to preliminary biol. screening.
ST sulfanilyl prepn pharmacol antibacterial fungicide; benzanilide sulfanilyl
IT Bactericides, Disinfectants, and Antiseptics
Fungicides and Fungistats
(of sulfanilyl compds.)
IT 93-98-1 6043-39-6 6043-41-0 6043-42-1 6833-15-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorosulfonylation of)
IT 89565-49-1P 89565-54-8P 89565-55-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antibacterial activity of)
IT 89564-97-6P 89564-98-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and antiinflammatory activity of)
IT 89564-92-1P 89564-93-2P 89565-04-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except

adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and fungicidal activity of)

IT 89564-87-4P **89565-05-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and herbicidal activity of)

IT 89564-86-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and inhibition by, of cyclooxagenase thromboxane)

IT 89565-27-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with diketones)

IT 67377-44-0P 89564-65-8P 89564-66-9P 89564-67-0P 89565-15-1P
89565-24-2P 89565-43-5P 89565-65-1P 89565-66-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with nitrogen contg. compds.)

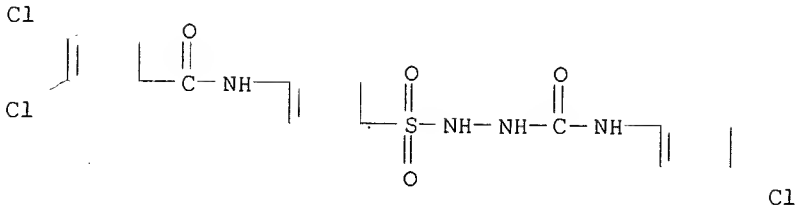
IT 89564-68-1P 89564-69-2P 89564-70-5P 89564-71-6P 89564-72-7P
89564-73-8P 89564-74-9P 89564-75-0P 89564-76-1P 89564-77-2P
89564-78-3P 89564-79-4P 89564-80-7P 89564-81-8P 89564-82-9P
89564-83-0P 89564-84-1P 89564-85-2P 89564-88-5P 89564-89-6P
89564-90-9P **89564-91-0P** 89564-94-3P 89564-95-4P
89564-96-5P 89564-99-8P 89565-00-4P 89565-01-5P 89565-02-6P
89565-03-7P 89565-06-0P 89565-07-1P 89565-08-2P 89565-09-3P
89565-10-6P 89565-11-7P 89565-12-8P 89565-13-9P 89565-14-0P
89565-16-2P 89565-17-3P 89565-18-4P 89565-19-5P 89565-20-8P
89565-21-9P 89565-22-0P 89565-23-1P 89565-25-3P 89565-26-4P
89565-28-6P 89565-29-7P 89565-30-0P 89565-31-1P 89565-32-2P
89565-33-3P 89565-34-4P 89565-35-5P 89565-36-6P 89565-37-7P
89565-38-8P 89565-39-9P 89565-40-2P 89565-41-3P 89565-42-4P
89565-44-6P 89565-45-7P 89565-46-8P 89565-47-9P 89565-48-0P
89565-50-4P 89565-51-5P 89565-52-6P 89565-53-7P 89565-56-0P
89565-57-1P 89565-58-2P 89565-59-3P 89565-60-6P 89565-61-7P
89565-62-8P 89565-63-9P 89565-64-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 93-91-4 123-54-6, reactions 367-57-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (isonicotinoyl)sulfanilylhydrazide)

IT 774-74-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dimethylsulfonylamide)

IT **89565-05-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and herbicidal activity of)

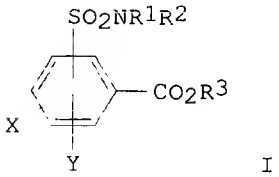
RN 89565-05-9 HCAPLUS
CN Benzenesulfonic acid, 4-[(3,4-dichlorobenzoyl)amino]-, 2-[[(4-chlorophenyl)amino]carbonyl]hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1983:166900 HCAPLUS
DN 98:166900
TI Antiviral aminosulfonylhalobenzoic acids
IN Mochida, Ei; Suzuki, Yasuo; Yamaguchi, Kazuo; Ohnishi, Haruo
PA Mochida Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DT **Patent**
LA English
IC A61K031-19; A61K031-235; A61K031-33
ICA C07C143-78; C07C143-72; C07D295-22
CC 63-6 (**Pharmaceuticals**)
Section cross-reference(s): **1**, **25**, 27
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 68408	A1	19830105	EP 1982-105460	19820622
	R: BE, IT				
	JP 58000914	A2	19830106	JP 1981-96376	19810622
	JP 58192820	A2	19831110	JP 1982-75782	19820506
	SE 8203878	A	19821223	SE 1982-3878	19820622
	WO 8300013	A1	19830106	WO 1982-JP242	19820622
	W: CH, NL				
	AU 8285097	A1	19830106	AU 1982-85097	19820622
	AU 533742	B2	19831208		
	NL 8220205	A	19830502	NL 1982-20205	19820622
	EP 132540	A1	19850213	EP 1984-106186	19820622
	R: BE, IT				
	GB 2119651	A1	19831123	GB 1983-12121	19830504
	DE 3316611	A1	19831110	DE 1983-3316611	19830506
	FR 2526316	A1	19831110	FR 1983-7644	19830506
PRAI	JP 1981-96376		19810622		
	JP 1982-75782		19820506		
	EP 1982-105460		19820622		
	WO 1982-JP242		19820622		

GI



I

AB Antiviral compns. (oral, nasal, rectal, parenteral, etc.), useful for the treatment of upper respiratory infection, pneumonia, bronchitis, etc.,

consist of aminosulfonyl(halo)benzoic acids (I, where X and Y = H, F, Cl, Br, NH, or NO2, R1 = H or lower alkyl, R2 = H, NH2, lower alkyl, hydroxyalkyl, alkoxy, aryl, guanyl, guanidino, ureido, oxamoylamino, or Cl-substituted pyridazinoamino groups or R1 and R2 together with N atom may form a satd. heterocycle, and R3 = H, cyclohexyl, benzyl, aryl, or C1-12 alkyl group; except not 3-aminosulfonyl-4-halobenzoic acid). I are prepd. by the reaction of a haloaminosulfonylbenzoyl chloride with an alc. or by the reaction of a chlorosulfonylbenzoic acid with an amine. Thus, a tablet contg. 200 mg 4-chloro-3-hydrazinosulfonylbenzoic acid [17749-21-2] was prepd. The antiviral activity of I against a variety of viral infections was demonstrated in mice.

ST aminosulfonylhalobenzoate virucide; halobenzoate aminosulfonyl virucide

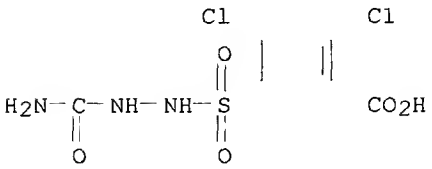
IT Virucides and Virustats
(aminosulfonyl(halo)benzoates)

IT 1429-44-3P 2295-63-8P 2736-23-4P 3086-91-7P 3585-45-3P
4793-22-0P 4793-24-2P 4793-25-3P 4793-28-6P 5046-15-1P
17749-21-2P 22892-96-2P 30170-05-9P 59210-61-6P 59210-63-8P
59210-65-0P 59210-73-0P 62971-57-7P 83173-85-7P 83173-86-8P
83173-87-9P 83173-88-0P 83173-89-1P 83173-90-4P 83173-91-5P
83173-92-6P **83173-93-7P** **83173-94-8P** 83173-95-9P
83173-96-0P 83173-97-1P 85338-72-3P 85338-73-4P 85338-74-5P
85338-75-6P 85338-76-7P 85338-77-8P 85338-78-9P 85338-79-0P
85338-80-3P 85338-81-4P 85338-82-5P
RL: **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as virucide)

IT **83173-93-7P**
RL: **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as virucide)

RN 83173-93-7 HCAPLUS

CN Benzoic acid, 5-[[2-(aminocarbonyl)hydrazino]sulfonyl]-2,4-dichloro- (9CI) (CA INDEX NAME)



L48 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN 1983:106925 HCAPLUS

DN 98:106925

TI Synthesis of sulfanilamido-naphthoquinones as potential antituberculous agents

AU Osman, S. A. A.; Abdalla, A. A.; Alaib, M. O.

CS Fac. Pharm., Univ. Khartoum, Khartoum, Sudan

SO Journal of Pharmaceutical Sciences (1983), 72(1), 68-71
CODEN: JPMSAE; ISSN: 0022-3549

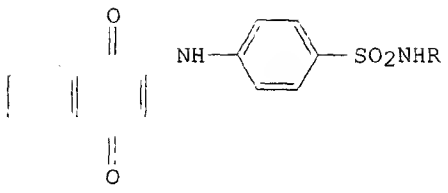
DT Journal

LA English

CC 25-24 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**, 27

OS CASREACT 98:106925

GI



I

AB 4-H2NC6H4CO2H, the acid hydrazides of PhCO2H, 2-HOC6H4CO2H, and isonicotinic acid, and (4-H2NC6H4)2SO2 condensed with 4-H2NC6H4SO2Cl to give N1-substituted sulfanilamides. These were then treated with 1,4-naphthoquinone to yield I (R = p-C6H4CO2H, NHBz, etc.). The partition coeff. for I showed, in some cases, high diffusion rates to the org. phase, benzene from physiol. Tyrode's soln. I are effective in low concn. in dioxane against the human sensitive strain of Mycobacterium tuberculosis. Sulfaniliamides obtained from p-aminosalicylic acid and thiosemicarbazide failed to react with 1,4-naphthoquinone. These sulfanilamides also showed high activity against the same Mycobacterium.

ST sulfanilamidonaphthoquinone prepn antitubercular; naphthoquinone sulfanilamido prepn antitubercular

IT Tuberculostatics
(sulfanilamide-naphthoquinone derivs.)

IT 84907-40-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(prenp. and reaction of, with naphthoquinone)

IT 6202-21-7P 6336-70-5P 84907-37-9P 84907-38-0P 84907-39-1P
84907-41-5P 84907-42-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with naphthoquinone)

IT 84907-44-8P 84907-45-9P 84907-46-0P 84907-47-1P 84907-48-2P
84907-49-3P 84907-50-6P 84907-51-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 84907-43-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn., methylation, and ethylation of)

IT 54-85-3 65-49-6 80-08-0 150-13-0 613-94-5 936-02-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with acetamidobenzenesulfonyl chloride)

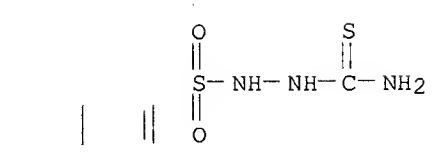
IT 130-15-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with sulfanilamides)

IT 121-60-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of, sulfonanilides from)

IT **84907-41-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with naphthoquinone)

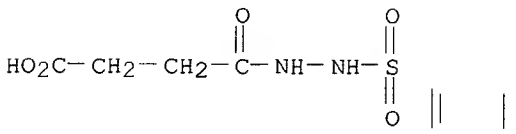
RN 84907-41-5 HCAPLUS

CN Benzenesulfonic acid, 4-amino-, 2-(aminothioxomethyl)hydrazide (9CI) (CA INDEX NAME)



L48 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN 1983:53299 HCAPLUS
DN 98:53299
TI Synthesis of arenesulfohydrazides of succinic acid and their methyl esters
AU Brizitskaya, A. N.; Gritsenko, I. S.; Salo, I. D.
CS Khark. Derzh. Farm. Inst., Kharkov, USSR
SO Farmatsevtichnii Zhurnal (Kiev) (1982), (5), 65-6
CODEN: FRZKAP; ISSN: 0367-3057
DT Journal
LA Ukrainian
CC 25-13 (**Benzene**, Its Derivatives, and Condensed **Benzenoid** Compounds)
Section cross-reference(s): **1**
AB Acylating RC6H4ZSO2NHNH2 (R = p-MeO, p-Me, p-Cl, p-Br, p-MeO2CNH, o-O2N, Z = bond; R = H, Z = CH2) with succinic anhydride in C6H6 and/or with MeO2CCH2CH2COCl in abs. MeOH gave 10 corresponding RC6H4ZSO2NHNHCOCH2CH2CO2R1 (I; R1 = H, Me, resp.) in 27-91% yield. I (R = R1 = Me, Z = bond) was sapond. to give the acid, and the latter esterified with abs. MeOH. I had hypoglycemic activity similar to that of butamide, and several I (R1 = Me, Z = bond) had fungicidal and/or fungistatic activity.
ST sulfonhydrazide succinic prepn hypoglycemic fungistat; arenesulfonhydrazide acylation; hydrazide arenesulfonic acylation
IT Acylation
(of arenesulfonhydrazides with succinic anhydride and Me succinoyl chloride)
IT Antidiabetics and Hypoglycemics
Fungicides and Fungistats
(succinic arenesulfonhydrazides)
IT Sulfonamides
RL: SPN (Synthetic preparation); PREP (Preparation)
(succinic arenesulfonhydrazides, prepn. and hypoglycemic and fungistatic activity of)
IT 108-30-5, reactions 1490-25-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of arenesulfonhydrazides with)
IT 1879-26-1 5906-99-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with Me succinoyl chloride)
IT 1576-35-8 2297-64-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with succinic anhydride)
IT 1950-68-1 2751-25-9 36331-57-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with succinic anhydride and with Me succinoyl chloride)
IT **84290-89-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and esterification of)
IT **84290-94-8P 84290-96-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hypoglycemic and fungistatic activity of)

IT 84290-90-4P 84290-91-5P **84290-92-6P** 84290-93-7P
84290-95-9P 84290-97-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 84315-49-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., sapon. and hypoglycemic and fungistatic activity of)
IT **84290-89-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and esterification of)
RN 84290-89-1 HCAPLUS
CN Butanedioic acid, mono[2-[(4-methylphenyl)sulfonyl]hydrazide] (9Cl) (CA 1NDEX NAME)



Me

L48 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2003 ACS
AN **1982:550747** HCAPLUS
DN **97:150747**
T1 Antiviral compositions containing aminosulfonylhalobenzoic acid derivatives
IN Mochida, Ei; Suzuki, Yasuo; Yamaguchi, Kazuo; Ohnishi, Haruo
PA Mochida Pharmaceutical Co., Ltd., Japan
SO Fr. Demande, 23 pp.
CODEN: FRXXBL
DT **Patent**
LA French
1C A61K031-19
ICA C07C143-78
CC 63-6 (**Pharmaceuticals**)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2493702	A1	19820514	FR 1981-21017	19811110
	FR 2493702	B1	19841012		
	JP 57081411	A2	19820521	JP 1980-157971	19801110
	JP 58017167	B4	19830405		
	JP 58000914	A2	19830106	JP 1981-96376	19810622
	NL 8220205	A	19830502	NL 1982-20205	19820622
PRAI	JP 1980-157971		19801110		
	JP 1981-96376		19810622		
	JP 1982-75782		19820506		
	WO 1982-JP242		19820622		

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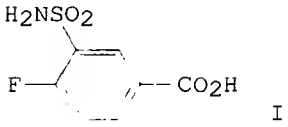


I

AB Oral, parenteral and nose drop formulations of 31 aminosulfonylhalobenzoic acid derivs., e.g., 3-aminosulfonyl-4-fluorobenzoic acid (I) [1535-45-1], were prepd. for the treatment of viral infections, esp., those of the upper respiratory tract. The antiviral activity of these compds. against influenza (A0, A2), parainfluenza type 3, ECHO, etc., viruses is reported.

ST aminosulfonylhalobenzoate virucide; sulfonylaminohalobenzoate virucide; benzoate aminosulfonylhalo virucide

IT Virucides and Virustats
(aminosulfonylhalobenzoic acid derivs.)

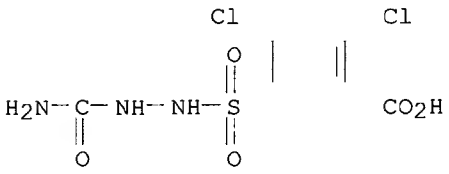
IT Respiratory tract
(disease, viral infection, aminosulfonylhalobenzoic acid derivs. for treatment of)

IT 1205-30-7P 1429-44-3P 1535-45-1P 2295-63-8P 2736-23-4P
3086-91-7P 3585-45-3P 4793-22-0P 4793-24-2P 17749-21-2P
22892-96-2P 59210-61-6P 59210-63-8P 59210-65-0P 59210-73-0P
59815-19-9P 62971-57-7P 82608-96-6P 83173-85-7P 83173-86-8P
83173-87-9P 83173-88-0P 83173-89-1P 83173-90-4P 83173-91-5P
83173-92-6P **83173-93-7P** **83173-94-8P** 83173-95-9P
83173-96-0P 83173-97-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antiviral activity of)

IT **83173-93-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antiviral activity of)

RN 83173-93-7 HCAPLUS

CN Benzoic acid, 5-[[2-(aminocarbonyl)hydrazino]sulfonyl]-2,4-dichloro- (9CI) (CA INDEX NAME)



L48 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2003 ACS

AN **1968:475378** HCAPLUS

DN **69:75378**

TI Derivatives of 5-phenyl-2,4-pentadienoic acid as potential **antimalarial** agents

AU Werbel, Leslie M.; Headen, Nancy; Elslager, Edward F.

CS Res. Lab., Parke, Davis and Co., Ann Arbor, MI, USA

SO Journal of Medicinal Chemistry (1968), 11(5), 1073-4
CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

CC 15 (Pharmacodynamics)

GI For diagram(s), see printed CA Issue.

AB I [where X and Y are H or Cl; and R = NHCSNH2, NMe(OMe), CH2CH2NEt2, N(CH2CO2Et)COCH:CHCH:CHPh, N(CH2CH2NEt2)COCH:CHCH:CHPh, NHCOMe, NHCO2Et, NHSO2C6H4Me-p, N(CH2CH2OH)COCH:CHCH:C6H3Cl2, (CH2)3NHCOCH:CHCH:CHC6H3Cl2, or iso-Pr; or R = iso-Pr, Y = H, and X = Me, Br, or Ph] were inactive against Plasmodium bergei and P. gallinaceum. I (R = iso-Pr, Y = H, X = Cl) had previously been reported to be active against P. gallinaceum.

ST **antimalarial** agents; Plasmodium inhibitors; inhibition Plasmodium

IT **Malaria**
(**antimalarial** substances, 5-phenyl-2,4-pentadienoic acid derivs. in relation to)

IT 18887-92-8P 18887-93-9P **18887-94-0P** 18887-95-1P 21480-12-6P 21480-13-7P 21480-15-9P 21480-16-0P 21480-17-1P 21480-19-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and **antimalarial** activity of)

IT **18887-94-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and **antimalarial** activity of)

RN 18887-94-0 HCAPLUS

CN 2,4-Pentadienoic acid, 5-(3,4-dichlorophenyl)-, 2-[(4-methylphenyl)sulfonyl]hydrazide (9CI) (CA INDEX NAME)